All written submissions made pursuant to this rule will be made available for public inspection at the Federal Building, 6505 Belcrest Road, Room 819, Hyattsville, Maryland, during regular hours of business (8 a.m. to 4:30 p.m., Monday to Friday, except holidays) in a manner convenient to the public business (7 CFR 1.27(b)).

Comments submitted should bear a reference to the date and page number of this issue in the Federal Register.

Done at Washington, D.C., this 20th day of July 1981.

J. K. Atwell,

Deputy Administrator, Veterinary Services.

[FR Doc. 81-21897 Filed 7-23-81; 8:45 am]

BILLING CODE 3410-34-M

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 2, 19, 20, 21, 30, 40, 51, 61, 70, 73 and 170

Licensing Requirements for Land Disposal of Radioactive Waste

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed Rule.

SUMMARY: This notice invites public comment on proposed amendments to the Commission's rules to provide specific requirements for licensing the land disposal of radioactive wastes. The proposed amendments set forth performance objectives for disposal, general requirements for land disposal of radioactive waste, technical requirements for disposal of radioactive waste into near-surface disposal facilities, requirements for submitting applications for licenses authorizing such activities and procedures which the Commission will follow in the issuance of such licenses. The rule does not deal with disposal by individual licensees by burial of their own wastes. The proposed amendments also set forth provisions for consultation and participation in license reviews by State governments and Indian tribes. Further amendments are proposed governing the transfer of licensed material for disposal. The proposed requirements respond to the needs and requests of the public, Congress, industry, the states, the Commission, and other Federal agencies for codification of regulations for the dispoal of low-level radioactive waste.

DATE: Comment period expires October 22, 1981. Comments received after October 22, 1981 will be considered if it is practical to do so, but assurance of consideration cannot be given except as to comments received on or before this date.

ADDRESS: All interested persons who desire to submit written comments in connection with the proposed amendments should send them to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555, Attention: Docketing and Service Branch. Copies of comments received on the proposed amendments may be examined in the Commission's Public Document Room at 1717 H Street NW., Washington, D.C.

FOR FURTHER INFORMATION CONTACT: R. Dale Smith, Chief, Low-Level Waste Licensing Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, telephone (301) 427-4433.

SUPPLEMENTARY INFORMATION:

I. Description of the Proposed Action

The U.S. Nuclear Regulatory Commission proposes to add to its rules in 10 CFR a new Part 61 to provide licensing procedures, performance objectives, and technical criteria for licensing facilities for the land disposal of radioactive waste. Specifically, the regulations would establish performance objectives for land disposal of waste; technical requirements for the siting, design, operations, and closure activities for a near surface disposal facility; technical requirements concerning the waste form that waste generators must meet for the land disposal of waste; classification of waste; institutional requirements; and administrative and procedural requirements for licensing a disposal facility. Amendments to other parts of 10 CFR are proposed to govern the certification and use of shipping manifests to track waste shipments and clarify, but not substantially modify, the requirements of existing regulations. Specific requirements for licensing facilities for the disposal of radioactive wastes by alternative land disposal methods will be proposed for Part 61 in subsequent rulemakings. Disposal of radioactive wastes by an individual licensee will continue to be governed by 10 CFR Part 20.

Part 61 defines which wastes are acceptable for disposal by near-surface disposal methods (and which wastes are not acceptable and must be disposed of by other methods). It also sets out the administrative and procedural requirements for licensing a facility for the land disposal of waste.

II. Need for the Proposed Action

Current general regulations for licensing materials do not contain any technical standards or criteria for the disposal of licensed materials. However, the need for comprehensive, national standards and technical criteria for the disposal of radioactive waste is well documented. The Commission has undertaken a program to establish such standards and criteria through this proposed rulemaking action.

III. Background

The Commission has had a program underway for several years to develop regulations and other guidance for the management and disposal of low-level waste (LLW). On October 25, 1978, the Commission published an Advance Notice of Proposed Rulemaking (43 FR 49811) regarding the development of specific regulations for the disposal of LLW. The development of these regulations was in response to needs and requests expressed by the public, the Congress, industry, the States, the Commission, and other Federal agencies for codification of regulations for the disposal of LLW. To provide guidance and support for developing the new regulation, 10 CFR Part 61, the Commission has prepared a draft environmental impact statement (EIS) NUREG-0782.[1] The statement is not a generic EIS on the disposal of LLW. Rather, it is a decision document that has been prepared to provide a basis for decisions on the performance objectives and technical and financial criteria set out in Part 61. As part of the process to scope the form and content of the EIS and the proposed regulation, the advance notice asked for advice, recommendations, and comments on the scope and content of the EIS and the regulation. As a part of this advance notice, the Commission announced its intention to:

- Develop technical criteria and standards for the disposal of LLW by shallow land burial and alternative disposal methods.
- Prepare a supporting EIS for the regulation.
- Coordinate development of technical criteria and standards for shallow land burial and alternative disposal methods with requirements for the classification of waste (Define the concentrations and quantities of waste acceptable for disposal by various disposal methods).

[1] Single copies of this report will be available free upon publication to the extent of supply and may be obtained by written request to the Director, Division of Technical Information and Document Control, Washington, D.C. 20555. Copies will also be made available for inspection or copying for a fee at the NRC Public Document Room, 1717 H Street NW., Washington, D.C.

U.S. NUCLEAR REGULATORY COMMISSION

In the Matter of Louisiana Energy Services, L.P.

Docket No. 70-3103-ML Official Exhibit No. NIRS/PC 86

OFFERED by: Applicant/Licensee Intervenor NIRS/PC

NRC Staff Other _____

IDENTIFIED on 10/26/05 Witness/Panel LES Disposal

Action Taken: ADMITTED REJECTED WITHDRAWN

Reporter/Clerk Bethany Engel

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Done at Washington, D.C., this 20th day of July 1981.

J. K. Atwell,

Deputy Administrator, Veterinary Services.

[FR Doc. 81-21887 Filed 7-23-81; 8:45 am]

BILLING CODE 3410-34-M

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The Commission received a total of 36 responses from the public on the advance notice. These comments have been docketed (Docket No. PR-61) and ay be examined in the Commission's blic Document Room located at 1717 .. Street NW., Washington, D.C. A detailed analysis by the Commission of the public responses received may also be examined in the Public Document Room. The respondents to the advance notice strongly supported the Commission's development of specific criteria and standards for the disposal of low-level waste. There was also support among the commenters that an overall EIS should be prepared to provide an essential part of the informational and decisional base for the development of the criteria and standards for the rulemaking action. However, the commenters were divided on the form and structure of the criteria and standards. Some commenters stated that the criteria and standards should be minimal and basic and should emphasize the performance objectives to be met by low-level waste disposal facilities. Others suggested the criteria and standards should be specific and detailed. Many commenters also stated that as part of the development of LLW disposal standards and criteria a system was needed for classifying or segregating the waste based on hazard.

A number of comments were received on the Commission's questions regarding alternative disposal methods shallow land burial. Although the mments in this area were mixed, the most often expressed opinion was that pri ary consideration should be given to developing requirements for shallow land burial and emplacement of waste into mined cavities. Disposal of wastes in ocean waters was given the lowest priority. Four commenters felt there was no need to establish a priority list of the alternative disposal methods to shallow land burial. The most often expressed disadvantage of any alternative method was the potential for increased cost. Approximately 60 percent of the respondents suggested other potentially viable methods for low-level waste treatment and/or disposal. The methods most frequently mentioned were volume reduction and other advanced processing techniques.

The comments received by the Commission on the advance notice were used by the Commission in scoping the form and content of the EIS and the regulation. For this scoping process, the Commission also considered a numbr of other sources, including:

- The results of program studies and other technical data on LLW management and disposal;
- Licensing experience with current LLW disposal sites and current LLW management techniques;
- Programs by the Environmental Protection Agency (EPA) to develop criteria and standards for LLW management and regulations for disposal of nonradio-active solid and chemically hazardous wastes;
- Recommendations of the Interagency Review Group on Nuclear Waste Management;
- Natural Resources Defense Council (NRDC) Petition for Rulemaking (PRM 20-7);
- Discussions with industry and public interest groups, State and Federal agencies, and others;
- Recommendations from the State Planning Council; and
- Public Law 96-573, "Low-Level Radioactive Waste Policy Act."

On February 28, 1980, the Commission also published a Notice of Availability of a preliminary draft regulation, dated November 5, 1979, announcing availability of the draft for public review and comment to help ensure wide distribution and early public review and comment (45 FR 13104). Copies of this draft regulation were distributed to all of the States. The comments received in response have been docketed (Docket No. PR-61) and may be examined in the Commission's Public Document Room located at 1717 H Street NW., Washington, D.C.

During the summer and fall of 1980, the Commission also sponsored 4 regional workshops to provide an opportunity for open dialogue among representatives of the States, public interest groups, the industry, and others on the issues to be addressed through the Part 61 rulemaking. One workshop was conducted by the Southern States Energy Board for the southeast region, a second by the Western States Energy Board for the west, a third by the Midwestern Regional Office of the Council of State Governments for the central region and midwest, and a fourth by the New England Regional Commission for the northeast. These workshops were particularly useful in formulating our positions on the more judgmental aspects of the rule and underlying assumptions (such as the length of time we should assume that active governmental controls could reasonably be relied on). A copy of the full transcript for each meeting and a summary report documenting the collective views of the participants has been placed in the docket for this rulemaking (Docket No PR-61) and may be examined at the Commission's Public Document Room located at 1717 H Street NW., Washington, D.C.

IV. Purpose and Scope of Part 61

It is the purpose of Part 61 to establish technical criteria and procedures for licensing facilities for the land disposal of radioactive wastes. Part 61 will not apply to alternative disposal methods such as deep space or ocean disposal. It is not practicable to develop one regulation dealing with such a wide variety in disposal technologies. Requirements for ocean disposal are a responsibility of the EPA. Space disposal, although technically feasible, is not developed to the point of routine, economic application.

The recently enacted Low-Level Radioactive Waste Policy Act (Pub. L. 96-573) sets forth a traditional definition of "low-level radioactive waste," i.e., radioactive waste not classified either as high-level radioactive waste, transuranic waste, spent nuclear fuel, or uranium mill tailings (byproduct material as defined in section 11 e.(2) of the Atomic Energy Act of 1954). While Part 61 is intended to deal with the disposal of most wastes included in this definition, the waste classification scheme that forms the basis for Part 61 has identified some "low level radioactive wastes" that are not suitable for disposal by the means that Part 61 provides, and alternative methods will have to be used. Therefore, the term "low-level radioactive waste" is not used in Part 61. Reference is made to "waste" and "radioactive wastes" which, within the context of Part 61, refers to those wastes that are acceptable for disposal under the provisions of Part 61.

This proposed regulation includes overall performance objectives expected in any type of land disposal and technical requirements for the disposal of waste near the surface. The technical requirements for disposal are set forth for disposal site characteristics, disposal site design and near-surface disposal facility operations, classification and characteristics of wastes, and institutional control and surveillance.

V. Summary of Rule

The following sections provide a discussion of the major provisions of Part 61.

A. Performance Objectives Versus Prescriptive Requirements

In developing Part 61, the Commission has considered two basic approaches: a performance objective approach and a

prescriptive approach. A regulation oriented toward performance objectives would establish the overall objectives to be achieved in waste disposal and would leave flexibility as to how the objectives would be achieved.

In the latter approach, specific detailed requirements for design and operation of a land disposal facility would be set out in the regulations. Prescriptive standards would specify the particular practices, designs, or methods to be employed—for example, the thickness of the cover material (the cap) over a land disposal trench, or the maximum slope of the trench walls.

Setting of prescriptive standards requires a considerable amount of detailed knowledge about potential designs, techniques, and procedures for disposing of wastes in order to prescribe which designs, techniques, and procedures are among the best and would assume that the state of art in waste disposal is developed to the point where there are clear choices to be made among all the potential approaches.

A combination of approaches has been chosen for Part 61. Overall performance objectives are stated and the applicant has flexibility in choosing design features and operating practices to achieve these objectives. There are some prescriptive requirements that have been judged necessary in light of past operating experience with disposal facilities. To the extent practicable, these requirements are stated as minimum criteria to afford some flexibility in meeting them.

B. Development of Performance Objectives

With respect to the performance objectives, the Commission's overall goal is to assure protection of the public health and safety. In considering radioactive waste disposal, attainment of this goal would appear to fall into two time frames: the short-term operational phase and the long term after operations cease.

In the short term, the concern is for protection of workers and the general population during operation of a disposal facility.

Protection of the public health and safety over the long term is most important and long-term performance of the land disposal facility after operations cease should be given greater emphasis than short-term considerations and conveniences. It is therefore at the time of the land disposal facility closure that greatest reliance will be placed on the disposal site characteristics and design as well as the waste characteristics to assure protection of the public health and safety without the need for continued active care and maintenance.

Assuring safety over the long term involves three considerations: (1) protection of individuals from inadvertent intrusion into the site and coming in contact with the waste at some point in the future; (2) protection of the general public from potential releases to the environment; and (3) stability of the disposed waste and the site to eliminate the need for ongoing maintenance of the site following closure.

Safety During Operations. The short-term performance objective included in Subpart C of Part 61 will be to assure that the disposal facility will be operated in conformance with the same Commission standards for radiation protection set out in 10 CFR Part 20 that are applied to all Commission licensees for protection of workers (See § 61.43.)

Protection of the Inadvertent Intruder. The Commission believes that intentional intrusion into the land disposal facility (e.g., an archaeologist reclaiming artifacts) cannot reasonably be protected against. However, after the land disposal facility closes, and after active institutional control and surveillance over the disposal site have been removed, one or a few individuals could inadvertently disturb waste in the disposal site through activities such as construction of a house or by farming.

Actual intrusion into the waste may never occur; but, for purposes of Part 61, it has been assumed that intrusion could occur, in which case the one or few such individuals should not receive an unacceptable radiation exposure. The Commission is applying a 500 mrem/yr maximum individual exposure limit for this unusual case. This limit is based on ICRP recommendations for dose limits to individuals and is a level that is recognized as providing adequate protection. Since only one, or at most a few, persons would be involved, it is not necessary to consider a population dose. This limit is then used to determine the allowable concentrations of nuclides in each class of waste. (See § 61.42.)

Protection of the Environment. The primary long-term pathway of release of radioactivity from near-surface disposal involves radionuclide contamination of and transport through the ground water. Presently there exists no specific numerical standard for protection of the ground water. The Environmental Protection Agency (EPA), under its generally applicable environmental standards-setting authority, has responsibility to prepare a standard that will set limits for releases of radioactivity to the general environment from disposal facilities. After examining other existing standards, the Commission does not anticipate that the standard will be much higher than the standards already established for releases to the environment from fuel cycle facilities set out in 40 CFR Part 190 (25 mrem/yr whole-body exposure). Also, the standard will probably not be any lower than the limits established in 40 CFR Part 141 for concentrations of radioactivity in drinking water (4 mrem/yr whole body exposure). As a part of the EIS for Part 61, the Commission analyzed a range of limits from 1 mrem/yr to 25 mrem/yr applied at various locations at and in the vicinity of a disposal facility. Based on the numerical limits already set for existing standards and this analysis, the Commission has selected an objective that requires that any movement of radioactivity not result in calculated doses exceeding 25 mrem/yr to an individual at the site boundary or cause the EPA Drinking Water Standards (40 CFR Part 141) to be exceeded at the nearest public drinking water supply (See § 61.41). When EPA standards are effective, licensees will have to comply with them. Because these standards are specific to land disposal of radioactive waste, they are included in Part 61 rather than 10 CFR Part 20.

C. Minimum Technical Requirements

To help assure that the performance objective will be met, minimum requirements will be placed on the various parts of an overall disposal "system".

The principal parts of an overall disposal system that are readily identifiable and will be addressed in the minimum technical requirements are:

- The characteristics of the disposal site into which the waste is placed;
- The method by which the disposal site is designed, the land disposal facility constructed, the waste emplaced, and the disposal site closed;
- The characteristics of the waste; and
- The degree and length of institutional control, surveillance, and monitoring of the disposal site after closure.

Disposal Site Suitability Requirements. A wide range of locations are potentially available for use as a near-surface disposal facility ranging from the humid east to the arid west. The approach the Commission has followed in establishing the disposal site suitability requirements has been to establish a common-sense base of disposal site evaluation factors that can be consistently applied throughout the country. The requirements would essentially eliminate certain limited

areas from consideration because of undesirable characteristics but would [illegible] large areas in each region where [illegible] able sites could be found (see § 61.50). The requirements are intended to eliminate, to the extent practicable, those areas with certain characteristics that are known to lead to or have high potential to lead to problems over the long term (e.g., flooding or rapid erosion of the site). These disposal site characteristics include:

(1) Complexity—The disposal site must be capable of being investigated and analyzed. If the disposal site cannot be characterized, prediction of potential long-term impacts is not possible.

(2) Potential Land and Resource Use—The disposal site should not have any extensive natural resources beneath it or have such high potential for other subsequent uses of the land that immediate intrusion into the disposal site after active institutional controls are removed is likely.

(3) Surface Water—Areas with large surface water sources or high potential for flooding should be avoided to reduce the greater potential for migration that large quantities of water present.

(4) Ground water—Ground water intrusion into the disposal units should be avoided to reduce the potential for leaching of waste and subsequent migration.

(5) Stability—Stability of the disposal site over the long term is important in [illegible]ng assure continued site integrity [illegible]n reducing the potential for migration and transport of waste to offsite areas.

Disposal Site Design, Land Disposal Facility Operation, and Disposal Site Closure Requirements. The specific requirements for design, operation, and closure of a near-surface disposal facility are directed at achieving long-term stability of the disposed waste and the disposal site so that, after closure, the need for ongoing active maintenance is eliminated and only minor custodial care, surveillance, and monitoring are required. (See § 61.51.) Other requirements are directed at enhancing natural disposal site characteristics by directing surface water away from disposal units, reducing infiltration of precipitation into disposal units, and reducing the potential for erosion, leading to an acceptable condition for disposal site closure.

Specific design requirements are set out relating to assuring protection of an inadvertent intruder from exposure to higher concentration wastes. Such wastes, defined by § 61.55, must be disposed of at greater depths (i.e., a minimum 5 meters below grade) or with equivalent natural or engineering barriers to reduce radiation exposure and further minimize the potential that an individual might inadvertently come in contact with the waste. In addition, a specific provision requires segregation of the lower activity compressible waste from the higher activity wastes and separate disposal. Higher activity wastes are subject to the structural stability requirements of § 61.55(b). Requirements are also established on environmental monitoring (§ 61.53).

Waste Characteristics and Classification. A cornerstone of the system to control the migration of radionuclides offsite is stability—stability of the waste and of the disposal site so that once emplaced and covered, the access of water to the waste can be eliminated or minimized. Thus, a basic requirement on waste is that it should be stable, that is, it should maintain its configuration and consistency under the conditions if would be exposed to after disposal. This stability should last long enough for the radioisotopes to decay to levels where they are no longer of concern from the migration standpoint.

While stability is a necessary characteristic for waste that has a potential for migration, studies have shown that much of the waste being disposed of does not contain sufficient amounts of radionuclides to be of concern from the migration standpoint. However, these same wastes, such as ordinary trash-type wastes tend to be unstable. It is obvious that if these wastes were disposed of with higher activity waste, their deterioration could lead to failure of the system and permit water to penetrate the disposal site and cause problems with the higher activity wastes. The choice, then, is either to require these less hazardous wastes to meet stability requirements or to segregate them from the more hazardous waste. Since stability requirements for low activity wastes would probably require expensive processing, segregation appears to have a cost/benefit advantage in spite of possible increased costs of disposal site stabilization.

A simple waste classification scheme has been devised and incorporated into Part 61. The scheme is based on the role that the waste plays in the assurance that the performance objectives of protecting persons from radiation from waste will be met.

The first categorization of waste is to identify those wastes that do not have to meet the stability requirements and that will be segregated at the disposal site. These wastes, called Class A segregated wastes, are defined in § 61.55 in terms of the maximum allowable concentration of certain isotopes and certain minimum requirements on waste form that are necessary for safe handling. The second category is for waste that requires stability, Class B stable waste, and is defined in terms of allowable concentrations of isotopes and requirements for a stable waste form as well as the minimum handling requirements.

There are concentrations of certain isotopes that will require protection against inadvertent intrusion after institutional controls have lapsed. These concentrations have been determined by analysis of the exposure to humans from the postulated intrusion of an individual after the 100 year period of institutional control. Any waste with concentrations of these isotopes that would cause an exposure greater than 500 millirem must be protected from intrusion by deeper burial or some other barrier. Wastes requiring such protection are identified as Class C intruder wastes.

The waste classification section also places upper limits on concentrations of isotopes in any class of waste. Wastes containing higher concentrations are generally excluded from near-surface disposal. Part 61 provides for special consideration by the Commission of proposed disposal methods on a case-by-case basis for wastes that exceed these values.

For most of the alpha emitting transuranic nuclides, the maximum allowable concentrations were calculated to be in the range of 10 nanocu[illegible]es per gram currently imposed by disposal facilities. These calculations were conservatively based, in that they did not allow credit for dilution by other wastes. If this factor were changed, the values would increase somewhat. A decision was made not to recalculate in order to come up with higher values. This decision is based on two factors. First, in the spirit of the ALARA (as Low as Reasonably Achievable) concept, the lower value of 10 nCi/g has been demonstrated as an achievable concentration to control the disposal of transuranic nuclides. This value has been imposed by the Department of Energy for some eleven years and by most of the commercial disposal site operators for nearly that long. The last commercial site imposed the 10 nCi/g restriction in 1981. Thus, there is no need to increase the limit from the standpoint of achievability. Second, there is a tendency toward a more conservative assessment of the hazard of certain transuranic nuclides (Ref. ICRP 30) and it does not seem prudent at this time to use the higher calculated values. A value of 350 nCi/g was established for plutonium-241, since

this concentration of short lived beta-emitting isotope decays to a 10 nCi/g concentration of americium-241, a longer lived alpha-emitter. At present, wastes containing transuranic nuclides in concentrations greater than 10 nCi/g are not being generaged in significant volumes.

Based on the values in Table I, and the isotopic content of various waste streams analyzed in the Environmental Impact Statement, the following waste streams would generally fall into the waste classes indicated.

Class A—Segregated Waste

PWR Ion Exchange Resin (low activity)
PWR Concentrated Liquids (low activity)
PWR Filter Sludges (low activity)
PWR Filter Cartridges (low activity)
PWR Compactible Contaminated Trash
BWR Compactible Contaminated Trash
Fuel Fabrication Compactible Trash
Fuel Fabrication Noncompactible Trash
Institutional Trash
Industrial Sealed Source Manufacturing Contaminated Trash
Industrial Low Activity Trash
Fuel Fabrication Process Waste
UF_6 Process Waste
Nuclear Medicine Waste
Biomedical Research Radiotracer Waste, Biowastes, and Contaminated Trash
Academic Institution Radioactive Radiotracer Wastes, Biowastes, and Contaminated Trash

Class B—Stable Waste

PWR Ion Exchange Resins
PWR Concentrated Liquid
PWR Filter Sludges
PWR Filter Cartridges
BWR Ion Exchange Resins
BWR Concentrated Liquids
BWR Filter Sludges
PWR Noncompactible Trash
BWR Noncompactible Trash
LWR [2] Nonfuel Reactor Components
LWR [2] Decontamination Resins
Tritium Production and Processing Waste Accelerator Targets
High Specific Activity Industrial Waste

Class C—Intruder Waste

Waste [2] from Isotope Production Facilities
Sealed [2] Sources

Note.—More recent data indicate that power reactor operation and waste processing characteristics are tending to move LWR wastes into higher classes.

The Commission has not developed a classification of waste based on total hazard. The classification is based on radiation protection considerations.

The Commission, however, has addressed other potential hazards presented by other associated components of waste (e.g., chemical and biological hazards) through te exclusion or treatment of certain chemical, physical and biological forms of waste.

The Commission recognizes the need for a "de minimis" classification of wastes, wastes that would be exempt from Part 61 and would be considered of no regulatory concern. The Commission believes, however, as the Federal Radiation Policy Council has recommended, that such exemptions should be determined on a specific waste basis. In this regard, a recent rulemaking (46 FR 16230) established such an exemption in a new § 20.306 for certain levels of tritium and carbon-14 contained in liquid scintillation and animal carcass waste. Other wastes may also readily lend themselves to treatment in this manner. The Commission will be working over the next 2 years to define these wastes and provide for additional exemptions as appropriate. Thus, Part 61 will not establish a generic "de minimis" category for waste.

D. Land Ownership of Near-Surface Disposal Facilities

Federal or State government ownership of land for disposal of waste at a land disposal facility has been a requirement in the Commission's regulations (10 CFR 20.302) since the inception of commercial disposal operations. This requirement is being continued to assure adequate control of the disposal site after closure and to reduce the potential for inadvertent intrusion. (See § 61.59.)

Although ownership by a State or the Federal Government is required before the Commission will issue a license, the Commission will consider an application when the site is privately owned if the applicant provides evidence that arrangements have been made with a State or the Federal government to assume ownership before the license is issued. The details of the arrangement may include whatever provisions the State or Federal agency considers appropriate as long as they are not inconsistent with requirements of the Commission.

E. Institutional Control

Control of access to the disposal site and use of the land following closure of the site is required to keep people from having contact with the waste and affecting the integrity of the disposal site. Active institutional controls involving periodic surveillance by the custodial agency and controlled access (e.g., maintaining a fence) cannot be relied upon indefinitely (§ 61.60 will not allow reliance on active institutional controls for more than 100 years since this is judged to be maximum time that governmental institutions should be relied on to carry out active controls.)

A monitoring program to check on continued disposal site integrity would also be carried out. Control and surveillance of the disposal site by the State or Federal land owner/custodial agency is needed to prevent an intruder from excavating, drilling wells, or performing other activities that would expose that individual or lead to possible increased migration offsite. Active controls would eventually be removed and replaced by more passive controls (e.g., government land ownership and records) which will be an inexpensive means of ensuring that knowledge of the disposal facility will be retained.

F. Financial Assurances.

Given the past history at some of the existing disposal sites, one of the key concerns is assurance of adequate financial qualification on the part of the applicant to construct and operate the disposal facility and to provide adequate financial provisions for disposal site closure and postoperational activities.

Subpart E requires that the applicant be financially qualified to conduct all licensed activities during the construction and operational phases of the land disposal facility. Proof of the financial qualifications of applicants is not currently required by Parts 30 and 40. This new requirement will help assure that resources are not expended on projects without adequate backing. This requirement should minimize the potential for early default or the abandonment of the site by the operator.

Section 61.62 of the Part 61 requires the applicant to provide an acceptable form of financial surety to ensure that funds are available to perform closure and stabilization and observation until the license is transferred to the custodial agency for institutional control or terminated. The Commission has received evidence of a great deal of public interest concerning the issue of financial responsibility for closure of a disposal site. Numerous written comments were made on this portion of the draft regulation, and the issue was also raised at all four workshops held to review this regulation. Many commenters felt that the licensee should be held responsible for the full costs of closure of a disposal site and that the license should not be terminated and the land returned to the custodial government authority until the licensee has completed satisfactory closure.

The amount of surety liability required is based on cost estimates

[2] These waste streams may contain concentrations of certain isotopes that will require special assessment and Commission approval for near-surface disposal.

submitted by the licensee in an approved plan for disposal site closure and stabilization. The applicant must submit a cost estimate for disposal site closure that includes consideration of inflation, increases in the amount of disturbed land, and the closure and stabilization activities that have already occurred at the disposal site. The Commission expects that the closure costs will be minimal when compared to the other life cycle costs of the disposal site because the regulation requires the licensee to perform the majority of closure and stabilization activities as an integral part of normal disposal site procedures during the operating period.

The types of surety arrangements being considered in Part 61 are similar to the Commission's recently enacted uranium mill tailings requirements (45 FR 65521). In their evaluation of various surety mechanisms, the Commission used the following criteria: (1) degree of security in obtaining funds in case the licensee defaults; (2) amount of administrative time and expense required to implement and monitor the surety; (3) problems of asset valuation posed by the mechanism; and (4) the cost of the surety mechanism. Based on this review, the Commission found the following types of surety mechanisms to be acceptable: surety bonds, cash deposits, trust funds, deposits of government securities, escrows, letters or lines of credit, and a combination of these mechanisms or such other types of arrangements as may be approved by the Commission. The Commission found that self-insurance for a private sector applicant was not an acceptable surety mechanism.

Section 61.63 requires the applicant to provide evidence to the Commission that a legally binding arrangement, such as a lease, exists between the applicant and the party holding title to the disposal site. Such a binding arrangement would delineate financial responsibility for the active institutional control period, which is not expected to exceed 100 years. The Commission feels that this regulatory approach is required so that all necessary activities following licensing transfer, such as surveillance, monitoring, and custodial activities, will be performed promptly and in a manner that will protect the public health and safety.

Currently the Commission lacks authority to require land disposal facility licensees to provide financial responsibility for activities occurring after the original licensee's responsibilities have ceased and the license has been transferred to another party. The Commission is considering legislation proposals that would give the Commission the authority to require financial assurances of land disposal facility licensees for the active institutional control period. In the meantime, the Commission feels that the most appropriate regulatory approach is to require an applicant to submit evidence of a binding arrangement.

Manifest Tracking System. Section 20.311 of Part 20 establishes the requirements for a manifest tracking system for wastes. The system will address the need for more complete information on the classification and characteristics of the waste, for improved accountability of wastes, and for a better data base. The EPA has recently instituted a manifest tracking system for hazardous wastes. The General Accounting Office (GAO) noted the need for improvements in these two areas in its report entitled "The Problem of Disposing of Nuclear Low-Level Waste: Where Do We Go from Here?", published March 31, 1980. The GAO recommended that the Commission "Determine who the generators of low-level are in both the Agreement and non-Agreement States and how much waste each licensee is generating" and "Establish a method to track waste from the point of generation to the point of disposal." Improving the data base on waste will improve the credibility of decisionmakers, enable better planning for inspections and emergencies, enhance projection of future waste generation, and help in site specific analyses and planning. The information on waste classification and characteristics is necessary for proper handling and disposal at the land disposal facility (e.g., which waste requires intruder barriers).

Licensees who ship under existing regulations are required to prepare and forward shipping manifests that comply with DOT regulations. The proposed manifest content requirements in § 20.311 are somewhat more comprehensive but compatible with DOT requirements. The waste generator must be specifically identified. The information requirements concerning the waste itself are somewhat more extensive and geared to information needed for disposal, not just transportation and handling. More explicit information on chemical content and composition and solidification agents is required. Licensees are required to comply with and certify compliance with waste form requirements of Part 61. This latter requirement stems solely from the technical requirements for disposal and is therefore new. The land disposal facility licensee must record data on the condition of the waste itself and document and certify receipt, handling, repackaging, storage, and disposal.

The use of the manifests as provided in § 20.311 provides a tracking system that is inspectable. Section 20.311 requires the shipper to provide copies of the manifest to precede and accompany shipments and investigation if notification of receipt or disposal is not received. The responsibility for tracking shipments is with the shipper who may be the generator, a service company who collects, stores, and delivers the waste, or an intermediate processor. A crosscheck is provided to ensure that delayed or missing shipments are investigated by requiring land disposal facility operators to periodically match advance copies of manifests to those for shipments actually received.

G. Life Cycle of a Typical Land Disposal Facility

The life of a typical facility can be broken into 5 phases: preoperational, operational, closure, postclosure observation, and institutional control. The following discussion considers each phase separately. The applicant's activities and procedural requirements as established by this proposed rulemaking are included.

Preoperational Phase. The preoperational phase consists of two parts: disposal site selection and characterization and licensing. The disposal site selection and characterization fall into the data gathering and planning phase. This is the phase in which the applicant selects a region of interest and searches for a number of possible disposal sites (a slate of candidate disposal sites), using reconnaissance-level information. The applicant then narrows the possible disposal sites down to one. After a proposed disposal site has been selected, based upon reconnaissance-level information, the applicant begins a detailed investigation (geology, depth to ground-water table, amount of rainfall, etc.) of the proposed disposal site. The applicant also initiates the preoperational monitoring program.

The applicant prepares an application for the land disposal facility following Subpart B. The applicant also prepares an environmental report. Of particular importance to this application are the performance objectives and technical requirements discussed earlier and the preliminary site closure plan, arrangements concerning land ownership and associated responsibilities, and financial assurance.

Licensing activities begin when the applicant files the application. The application is reviewed for completeness and acceptability in accordance with new Paragraph 2.101(b)(2), prior to docketing. Notice of receipt of the tendered application is to be published in the Federal Register. The Commission notifies state, local and tribal officials and begins to coordinate with these officials. Once docketed, the application is again noticed in the Federal Register and the application and environmental report widely distributed. An opportunity for interested parties to request a hearing is provided pursuant to 10 CFR 2.105. Application fees are paid in accordance with 10 CFR Part 170.

The regulatory review period follows. The applicant continues any disposal site studies and the preoperational observation and monitoring. The applicant also responds to informational requests. Section 61.3 requires that construction not begin until a decision is made to issue the license. The application and environmental report are updated if necessary.

The Commission reviews the application and the accompanying environmental report. The Commission requests additional information if necessary. The Commission prepares a draft environmental impact statement (DEIS). If hearings are requested, an Atomic Safety and Licensing Board (ASLB) is appointed. After the Commission's review is completed and documented and the EIS and any hearings completed, and the Commissioners have approved, the Director issues the license or denies the application in accordance with the criteria in § 61.23 and any decision rendered by the Licensing or Appeals Board. Hearings, if any, would be held in accordance with existing rules in 10 CFR Part 2. An Atomic Safety and Licensing Appeal Board and/or the Commission may review the findings of the ASLB or the ASLB findings may be appealed to these next levels and to the courts. Upon resolution of the hearings, reviews, and appeals, and the Commissioners have approved, the Director takes final action to issue or deny and publishes a notice in the Federal Register. If the ownership of the land has not been transferred to the State or Federal government, transfer would now take place. If the license is issued, it is subject to the general license condition in § 61.24 and to specific conditions as required.

If no hearings have been requested, and the Commissioners approve, the Commission publishes a notice of the issuance in the Federal Register in accordance with § 2.106, and the Director takes final action to issue or deny the license.

State and Indian tribes may participate in the Commission's license review process to aid the Commission in its review. Subpart F of the proposed Part 61 addresses such participation, which is in addition to participation as already provided in Parts 2 and 51.

Examples of the forms that State and Tribal participation may take include:

(1) Development of technical data, including, but not limited to, socioeconomic, hydrological, geological, environmental, or land use data for incorporation into the Commission's environmental impact statement on the application or other analyses.

(2) Development of public participation mechanisms to be included in the licensing process.

(3) Provision of a technical data base to provide verification to the Commission for materials presented in the license application.

(4) Exchange of State and Commission staff for cooperative review.

Operational Phase. After issuance of a license by the Commission the land disposal facility is constructed and waste receipt and disposal operations start. At intervals specified in the license, (the normal term for materials licenses is currently 5 years) the licensee would be required to submit a license renewal application (§ 61.27). At this time, the disposal site closure plan and funding requirements would be updated and financial arrangements for assurance of adequate funding reviewed. A public hearing would be offered. The licensee may also apply for amendments to the license (§ 61.26).

Disposal Site Closure Phase. As the disposal site becomes filled, time for disposal site closure approaches. Prior to closure, the licensee would submit a final closure plan for review and approval (§ 61.28). A public hearing would be offered. Upon approval, the licensee implements the plan. This would consist of decontamination and dismantlement, as appropriate, of buildings. Final disposal site contouring and preparation is performed. The licensee should work toward closure during the entire operational phase so that disposal site closure would not involve a major task.

Postclosure Observation and Maintenance. Implementation of the closure plan would be followed by a period of postclosure observation and maintenance on the part of the licensee, in which the licensee's monitoring and maintenance programs would continue (§ 61.29). This period is expected to last about 5 years to help assure that the disposal site is in a stable condition so that only minor custodial care, surveillance, and monitoring by the custodial agency are required. When the disposal site has reached a stable condition, the licensee may prepare and submit an application for transfer of the license. A public hearing would be offered. Among other things, the licensee must provide reasonable assurance that the site meets all performance objectives under Subpart C, and the Commission must find that the State or Federal agency responsible for postclosure care of the site is prepared to assume these responsibilities. As a condition for assuming these responsibilities, a State may require the licensee to comply with requirements of its own, as long as State's requirements are not inconsistent with the requirements of the Commission. Upon a satisfactory finding, the license will be transferred to the Federal or State custodial agency to cover their activities during the active institutional control period (§ 61.30).

Institutional Control Board. During the institutional control period, which for purposes of Part 61, the Commission assumes to be not more than 100 years, the custodial agency carries out a program of monitoring to assure continued satisfactory site performance and physical surveillance to keep people off the site and carries out minor custodial activities at the site. As a part of the license termination, the licensee is required to place records of the disposal facility with local, State, and Federal agencies. These records along with restrictions on the property deed and trench markers should help minimize disturbance of the disposal site. These latter mechanisms are those that would continue after the institutional control period. At the end of the necessary institutional control period, the license may be terminated (§ 61.31).

H. Other Considerations

Application to Existing Sites. Many of the operational provisions and waste characteristics requirements proposed in this rulemaking are in effect at the existing disposal facilities. Although nearly all disposal at existing facilities is carried out under State licenses, it would be the Commission's intent that in the future all disposal would be expected to comply with the provisions of Part 61. Existing disposal facilities should have no difficulty in complying with the waste classification and characteristics, manifest requirements, and the minimum requirements dealing with design and operations.

environmental monitoring, closure, post-closure observation, and institutional control. Where existing operating sites have difficulty meeting any of the criteria, the Commission will consider the matter on a case by case basis.

Naturally Occurring and Accelerator-Produced Radionuclides in Waste. Although the Commission has no direct statutory authority over naturally occurring and accelerator-produced radionuclides the evaluation of any specific disposal site will include consideration of the total impacts from all waste disposed of at the disposal site, including byproduct, source, special nuclear material, and naturally occurring and accelerator-produced material. Specific concentration limits for the disposal of important naturally occurring and accelerator-produced nuclides will be included in the planned regulatory guide on the classification of waste.

Paperwork Reduction Act. As required by Pub. L. 96-511, this proposed rule will be submitted to the Office of Management and Budget for clearance of the reporting/recordkeeping/application requirements.

Regulatory Flexibility Act. Based upon the information available at this stage of this rulemaking proceeding and in accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission hereby certifies that this rulemaking will not, if promulgated, have a significant economic impact upon a substantial number of small entities.

The Regulatory Flexibility Act (Public Law 96-345) was signed into law in September 1980. The Act's principal objective is to make certain that Federal agencies try, where possible, to fit regulatory requirements to the scale of the affected activity. Significant economic impacts on a substantial number of small entities is a major concern. The proposed Part 61 and accompanying rule changes will potentially impact a significant number of persons licensed by the Commission and the Agreement States. The following discussion addresses the analyses required by the Act and briefly describes the impacts and how the interests of the small entities were considered in developing this proposed rule. The draft EIS for Part 61 provides additional background information and analysis of the impacts of this rulemaking action.

The need for standards to govern the disposal of radioactive wastes and new regulations to implement these standards is discussed in detail in the draft EIS.

Some provisions of the proposed rulemaking will apply to all Commission licensees who transfer radioactive waste for disposal on land. The Commission has approximately 9,000 licensees. All but a few hundred are small entities. Types of small entities that may be impacted include physicians, hospitals, medical and clinical laboratories, colleges and universities, waste collection companies, small industrial operations, and waste disposal site operators. Exact numbers of impacted entities are not available. Based on a 1979 survey of Commission licensees, less than one quarter of the licensees should be affected on a regular basis.

The reporting, recordkeeping, and other requirements with which licensees must comply in the proposed rule impose only a minor incremental burden and will result in better accountability of wastes and improvements in disposal of wastes. The reporting requirements are directed primarily at disposal site operators. Currently only two firms hold this type of license. In the foreseeable future it is not anticipated that the number of this type of licensee will reach ten. The requirements are comparable to existing requirements or requirements that would be imposed in specific licenses for site operation. All licensees transferring waste would be required to investigate and file reports if shipments are lost. (See proposed § 20.311 of 10 CFR Part 20.) Existing regulations have similar but more specific reporting requirements for lost radioactive materials. All licensees transferring waste are also required to prepare complete shipping manifests. The user and radiation safety personnel currently preparing wastes for shipment will have to spend some additional time preparing manifests and tracking shipments. Licensees are already required to keep records of transfers and certain disposals.

Compliance with the waste classification and characteristics requirements is required of all licensees who transfer waste for land disposal. The need for and impacts of compliance with waste criteria are addressed in the draft EIS. The types of impacts that the rule changes may have include additional waste treatment and processing, use of containers to meet waste form requirements, new labels for packages, and higher disposal costs in some cases to cover, for example, the addition of intruder barriers when required. Based on the analysis in the Draft EIS, it appears that very few small entities generate radioactive waste that would be subject to these requirements.

Federal rules that overlap the proposed rule are primarily those of the Department of Transportation (DOT). The Commission is not aware of any rules that duplicate or conflict with the proposed rule except that reports to the Environment Protection Agency on effluent releases and broker activities required by "Superfund" registration may be duplicative. The Commission would particularly welcome comments on how to minimize duplication with "Superfund" requirements. The Commission and DOT have an established working relationship implemented through a formal Memorandum of Understanding. The rule itself acknowledges the need to comply with DOT rules, and the Commission currently inspects licensees for compliance with DOT requirements. The manifest required by this rulemaking is consistent with DOT requirements, and the same document will be used to meet requirements of both agencies. The waste form and packaging requirements are in addition to and compatible with DOT rules.

The Regulatory Flexibility Act also requires discussion of alternatives to the proposed rule. The recordkeeping and reporting requirements impose such a minor incremental burden that no relief or exemption was considered. They are, in fact, minor modifications of existing rules and practices. Further, since the small entities account for a significant percentage of the volume of waste generated, it is important that all licensees participate in the manifest tracking system. The waste classification and characteristics portion of the rule does provide some relief from compliance for waste produced by the small entities. Where radiological hazard permits, segregated disposal has been provided as an option to complying with more restrictive waste acceptance requirements. The rule is a combination of performance and prescriptive requirements, as discussed earlier. Exemption from coverage is feasible when the radiological hazard of the wastes permits. The exemption of less hazardous wastes on a specific waste basis by separate rulemaking efforts was discussed previously. (See de minimis discussion in Section V.C.)

The economic costs of the rule to small entities have not been quantified. The incremental burdens are judged small and have been addressed qualitatively in this summary and in the EIS. The rulemaking should not affect economic factors such as employment, business viability, or ability for affected entities to compete.

The requirements in waste disposal practices are judged to significantly outweigh the small economic impact on

small entities. However, the Commission is seeking comments and suggested modifications because of the widely differing conditions under which small entities operate.

Any small entity subject to this regulation who determines that because of its size, it is likely to bear disproportionate adverse economic impact should apprise the Commission in a comment that indicates:

(1) The size of their business and how the proposed regulations would result in a significant economic burden upon them as compareed to larger organizations in the same business community;

(2) How the proposed regulations could be modified to take into account their differing needs or capabilities;

(3) The benefits that would accrue, or the detriments that would be avoided, if the proposed regulations were modified as suggested by the commenter; and

(4) How the proposed regulations, as modified, would still adequately protect the public health and safety.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and section 553 of title 5 of the United States Code, notice is hereby given that adoption of a new 10 CFR Part 61 and the following amendments to 10 CFR Parts 2, 19, 20, 21, 30, 40, 51, 70, 73 and 170 is contemplated.

A new Part 61 is added to 10 CFR to read as follows:

PART 61—LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE WASTE

Subpart A—General Provisions

Subpart B—Licenses

Subpart C—Performance Objectives

Subpart D—Technical Requirements for Disposal Facilities

Subpart E—Financial Assurances

Subpart F—Participation by State Governments and Indian Tribes

Subpart G—Records, Reports, Tests, and Inspections

Authority: Secs. 53, 57d, 62, 63, 65, 81, 161b., i., o., 182, 183, Pub. L. 83-703, as amended, 68 Stat., 930, 932, 933, 935, 948, 950, 953, 954, as amended (42 U.S.C., 2073, 2077, 2092, 2093, 2095, 2111, 2201, 2232, 2233); Secs. 202, 206, Pub. L. 93-438, 88 Stat. 1244, 1246 (42 U.S.C. 5842, 5846); Sec. 14, Pub. L. 95-601 (42 U.S.C. 2021a). For the purposes of Sec. 223, 68 Stat. 958, as amended, 42 U.S.C. 2273, Table 5, §§ 61.55, 61.56 issued under Sec. 161b, 68 Stat. 948; §§ 61.3, 61.10 through 61.17, 61.24, 61.61 through 61.63, and 61.80 issued under Sec. 161o., 68 Stat. 950, as amended (42 U.S.C. 2201).

Subpart A—General Provisions

§ 61.1 Purpose and scope.

(a) The regulations in this part establish, for land disposal of radioactive waste, the procedures and criteria for the issuance, and terms and conditions upon which the Commission issues licenses, for the disposal for others of radioactive wastes containing byproduct, source and special nuclear material. Disposal of waste by an individual licensee is set forth in Part 20 of this chapter.

(b) Except as provided in § 61.6 "Exemptions" and in Part 150 of this chapter, the regulations in this part apply to all persons in the United States. The regulations in this part do not apply to the disposal of high-level waste as provided for in Part 60 of this chapter or byproduct material (as defined in § 40.4(a-1)) as provided for in Part 40 of this chapter and licensed material as provided for in Part 20.

§ 61.2 Definitions.

As used in this part:

"Active maintenance" means any significant remedial activity needed during the period of institutional control to maintain a reasonable assurance that the performance objectives in §§ 61.41 and 61.42 are met. Such active maintenance includes ongoing activities such as the pumping and treatment of water from a disposal unit or one-time measures such as replacement of a disposal unit cover. Active maintenance does not include custodial activities such as repair of fencing, repair or replacement of monitoring equipment, revegatation, minor additions to soil cover, minor repair of disposal unit covers, and general disposal site upkeep such as mowing grass.

"Buffer zone" is a portion of the disposal site that is controlled by the licensee and that lies between the disposal units and the boundary of the site.

"Chelating agent" means a chemical compound which can be attached to a metal ion by at least two bonds in such a way as to form a ring structure. It is used to sequester metal ions that might be undesirable in a particular environment.

"Commencement of construction" means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a land disposal facility. The term does not mean disposal site exploration, necessary roads for disposal site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the disposal site or the protection of environmental values.

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

"Director" means the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission.

"Disposal" means the isolation of radioactive wastes from the biosphere by emplacement in a land disposal facility.

"Engineered barrier" means a man-made structure or device that is intended to protect an intruder from inadvertent exposure to radiation from certain wastes.

"Disposal site" means that portion of a land disposal facility which is used for disposal of waste. It consists of disposal units and a buffer zone.

"Disposal unit" means a discrete portion of the disposal site into which waste is placed for disposal. For near-surface disposal the unit is usually a trench.

"Government agency" means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the government.

"Inadvertent intruder" means a person who might occupy the disposal site unknowingly after closure and engage in normal activities, such as agriculture, dwelling construction, and other pursuits in which the person might be exposed unknowingly to radiation from the waste.

"Indian Tribe" means an Indian tribe as defined in the Indian Self-Determination and Education Assistance Act (25 USC 450).

"Intruder barrier" means a sufficient depth of cover over the waste that inhibits contact with waste and helps to assure that radiation exposures to an inadvertent intruder will meet the performance objectives set forth in this part, or engineered structures that provide equivalent protection to the inadvertent intruder.

"Hydrogeologic unit" means any soil or rock unit or zone which by virtue of its porosity or permeability, or lack thereof, has a distinct influence on the storage or movement of groundwater.

"Land disposal facility" means the land, buildings, and equipment which is intended to be used for the disposal of radioactive wastes into the subsurface of the land. For purposes of this chapter, a geologic repository as defined in Part 60 is not considered a land disposal facility.

"License" means a license issued under the regulations in Parts 30 through 35, 40, 50, 61, or 70 of this chapter, including licenses to operate a production or utilization facility pursuant to Part 50 of this chapter.

"Licensee" means the holder of such a license.

"Monitoring" means observing and making measurements to provide data to evaluate the performance and characteristics of the disposal site.

"Near-surface disposal facility" means land disposal facility in which radioactive waste is disposed of in or within the upper 15-20 meters of the earth's surface.

"Person" means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than the Commission or the Department of Energy, (except that the Department of Energy is considered a person within the meaning of the regulations in this part to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the Commission pursuant to section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244)), any State or any political subdivision of or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing.

"Site closure and stabilization" means those actions that are taken upon completion of operations that prepare the disposal site for custodial care and that assure that the disposal site remain stable and will not need ongoing active maintenance.

"State" means any State, Territory, or possession of the United States, the Canal Zone, Puerto Rico, and the District of Columbia.

"Surveillance" means observation of the disposal site for purposes of visual detection of need for maintenance, custodial care, evidence of intrusion, and compliance with other license and regulatory requirements.

"Tribal Governing Body" means a Tribal organization as defined in the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450).

"Waste", for purposes of this part, means those low-level radioactive wastes containing source, special nuclear, or byproduct material that are acceptable for disposal in a land disposal facility. For the purposes of this definition, low-level waste has the same meaning as in the Low-Level Waste Policy Act, that is radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in section 11e.(2) of the Atomic Energy Act.

§ 61.3 License required.

(a) No person may receive, possess, and dispose of radioactive waste containing source, special nuclear, or byproduct material at a land disposal facility unless authorized by a license issued by the Commission pursuant to this part.

(b) Each person shall file an application with the Commission and obtain a license as provided in this part before commencing construction of a land disposal facility. Failure to comply with this requirement may be grounds for denial of a license.

§ 61.4 Communications.

Except where otherwise specified, all communications and reports concerning the regulations in this part and applications filed under them should be addressed to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Communications reports, and applications may be delivered in person at the Commission's offices at 1717 H Street NW., Washington, D.C. or 7915 Eastern Avenue, Silver Spring, Maryland.

§ 61.5 Interpretations.

Except as specifically authorized by the Commission, in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be considered binding upon the Commission.

§ 61.6 Exemptions.

The Commission may, upon application by an interested person, or upon its own initiative, grant any exemption from the requirements of the regulations in this part as it determines is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest.

§ 61.7 Concepts.

(a) *The Disposal facility.* (1) Part 61 is intended to apply to *land disposal* of radioactive waste and not to other methods such as sea or extraterrestrial disposal. In its present form, Part 61 contains procedural requirements and performance objectives applicable to any method of land disposal. It contains specific technical requirements for *near-*

surface disposal of radioactive waste which involves disposal in the uppermost 15 to 20 meters of the earth. Technical requirements for alternative methods will be added in the future.

(2) Near-surface disposal of radioactive waste takes place at a *near-surface disposal facility*, which includes all of the land and buildings necessary to carry out the disposal. The *disposal site* is that portion of the facility which is used for disposal of waste and consists of *disposal units* and a *buffer zone*. A *disposal unit* is a discrete portion of the disposal site into which waste is placed for disposal. For near-surface disposal, the disposal unit is usually a trench. A *buffer zone* is a portion of the disposal site that is controlled by the licensee and that lies between the boundary of the disposal site and any disposal unit. It provides controlled space to establish *monitoring* locations which are intended to provide an early warning of radionuclide movement, and to take mitigative measures if needed.

(b) *Waste Classification and Near-Surface Disposal.* (1) Disposal of radioactive waste in near-surface disposal facilities has two primary safety objectives: *prevention of migration* of radionuclides, primarily through *groundwater*; and prevention of exposure to *inadvertent intruders*.

(2) A cornerstone of the system to control the migration of radionuclides offsite is *stability*—stability of the waste and the disposal site so that once emplaced and covered, the access of water to the waste can be eliminated or minimized. While stability is a necessary characteristic for waste that has a potential for migration, much radioactive waste does not contain sufficient amounts of radionuclides to be of concern from this standpoint; this waste, however, tends to be unstable, such as ordinary trash type wastes. If mixed with the higher activity waste, their deterioration could lead to failure of the system and permit water to penetrate the disposal unit and cause problems with the higher activity waste. Therefore, in order to avoid placing requirements for a stable waste form on relatively innocuous waste, these wastes have been classed as *Class A segregated* waste. Even though the Class A segregated waste is unstable, it decays to acceptable levels during the period when the site is occupied and active maintenance can control water infiltration. Those higher activity wastes that should be stable for proper disposal are classed as *Class B stable* waste. The Class A segregated waste will be disposed of in separate disposal units at the disposal site. For certain isotopes, a maximum disposal site inventory will be established based on the characteristics of the disposal site.

(3) It is possible but unlikely that persons might occupy the site in the future and engage in normal pursuits without knowing that they were receiving radiation exposure. These persons are referred to as *inadvertent intruders*. Protection of such intruders can involve two principal controls: *institutional control* over the site after operations by the site owner to assure that no such occupation or improper use of the site occurs; or, designating which waste would present an unacceptable risk to an intruder, and disposing of this waste in a manner that provides some form of *intruder barrier* that is intended to prevent contact with the waste. This regulation incorporates both types of protective controls.

(4) Institutional control is relied on for periods up to *100 years* to control access to the closed site. This permits the disposal of Class A segregated and Class B stable waste without special provisions for intrusion protection, since these classes of waste contain types and quantities of radioisotopes that will decay during the 100-year period to levels that do not pose a danger to public health and safety.

(5) Waste that will not decay to such levels within 100 years is designated as *Class C intruder* waste. This waste is disposed of at a greater depth than the other classes of waste so that subsequent surface activities by an intruder will not disturb the waste. Where site conditions prevent deeper disposal, *engineered barriers* such as concrete covers may be used. The assumed effective life of these intruder barriers is 500 years. A *maximum concentration* of radionuclides is specified for all wastes so that at the end of the 500 year period, remaining radioactivity is at a level that does not pose a danger to public health and safety. Waste with concentrations above these limits is generally unacceptable for near-surface disposal. Some provisions are made for exceptions on a case-by-case basis. Class C intruder waste must also be stable, since stability contributes to intruder protection by providing a recognizable and nondispersible waste form.

(c) *The Licensing Process.* (1) During the *preoperational phase*, the potential applicant goes through a process of *disposal site selection* by selecting a region of interest and examining a number of possible disposal sites and narrowing the choice to the *proposed* site. Through a detailed investigation of the *disposal site characteristics* the potential applicant obtains data on which to base an analysis of the disposal site's suitability. Along with these data and analyses, the applicant submits other more general information to the Commission in the form of an *application* for a license for land disposal. The Commission's review of the application is in accordance with established administrative procedures and may involve *participation* by affected *State governments* or *Indian tribes*. While the proposed disposal site must be owned by a State or the Federal government before the Commission will issue a license, it may be privately owned during the preoperational phase if suitable arrangements have been made with a State or the Federal government to take ownership in fee of the land before the license is issued.

(2) During the *operational phase*, the licensee carries out disposal activities in accordance with the requirements of this regulation and any conditions on the license. Periodically, the authority to conduct the above surface operations and receive waste will be subject to a *license renewal*, at which time the operating history will be reviewed and a decision made to permit or deny continued operation. When disposal operations are to cease, the licensee applies for an amendment to his license to permit *site closure*. After final review of the licensee's *site closure and stabilization plan*, the Commission may approve the final activities necessary to prepare the disposal site for the period of institutional control, without the need for ongoing *active maintenance* of the site.

(3) During the period when the site closure and stabilization activities are being carried out, the licensee is in a *disposal site closure* phase. Following that, for a period of at least 5 years, the licensee must remain at the disposal site for a period of *postclosure observation and maintenance* to assure that the disposal site is stable and ready for institutional control. At the end of this period, the licensee applies for a *license transfer* to the disposal site owner.

(4) After a finding of satisfactory disposal site closure, the Commission will transfer the license to the State or Federal agency that owns the disposal site. If the Department of Energy is the Federal agency the license will be terminated. Under the conditions of the transferred license, the owner will carry out a program of *monitoring* to assure continued satisfactory disposal site performance, physical *surveillance* to restrict access to the site and carry out minor *custodial activities*. At the end of

the prescribed period of institutional control, the license will be terminated by the Commission.

Subpart B—Licenses

§ 61.10 Content of application.

(a) An application to receive from others, possess, use and dispose of wastes containing or contaminated with source, byproduct or special nuclear material by land burial must consist of general information, specific technical information, institutional information, and financial information as set forth in §§ 61.11 through 61.16. An environmental report prepared in accordance with Part 51 of this chapter must accompany the application.

§ 61.11 General information.

The general information must include each of the following:

(a) Identity of the applicant including:

(1) The full name, address, telephone number and description of the business or occupation of the applicant;

(2) If the applicant is a partnership, the name, and address of each partner and the principal location where the partnership does business;

(3) If the applicant is a corporation or an unincorporated association, (i) the state where it is incorporated or organized and the principal location where it does business, and (ii) the names and addresses of its directors and principal officers; and

(4) If the applicant is acting as an agent or representative of another person in filing the application, all information required under this paragraph must be supplied with respect to the other person.

(b) Qualifications of the applicant:

(1) The organizational structure of the applicant, both offsite and onsite, including a description of lines of authority and assignments of responsibilities, whether in the form of administrative directives, contract provisions, or otherwise;

(2) The technical qualifications, including training and experience, of the applicant and members of the applicant's staff to engage in the proposed activities and minimum training and experience requirements for personnel filling key positions described in § 61.11(b)(1).

(3) A description of the applicant's personnel training program; and

(4) The plan to maintain an adequate complement of trained personnel to carry out waste receipt, handling, and disposal operations, in a safe manner.

(c) A description of:

(1) The location of the proposed disposal site;

(2) The general character of the proposed activities;

(3) The types and quantities of radioactive waste to be received, possessed, and disposed of;

(4) Plans for use of the land disposal facility for purposes other than disposal of radioactive wastes; and

(5) The proposed facilities and equipment.

(d) Proposed schedules for construction, receipt of waste, and first emplacement of waste at the proposed land disposal facility.

§ 61.12 Specific technical information.

The specific technical information must include the following information needed for demonstration that the performance objectives of Subpart C of this part and the applicable technical requirements of Subpart D of this part will be met:

(a) A description of the natural disposal site characteristics as determined by disposal site selection and characterization activities. The description must include geologic, technical hydrologic, meteorologic, climatologic, and biotic features of the disposal site and vicinity.

(b) A description of the design features of the land disposal facility and the disposal units. For near-surface disposal, the description must include those design features related to infiltration of water; integrity of covers for disposal units; structural stability of backfill, wastes, and covers; contact of wastes with standing water; disposal site drainage; disposal site closure and stabilization; elimination of long-term disposal site maintenance; inadvertent intrusion; occupational exposures; and disposal site monitoring.

(c) A description of the principal design criteria and their relationship to the performance objectives.

(d) A description of the design basis natural events or phenomena and their relationship to the principal design criteria.

(e) A description of codes and standards which the applicant has applied to the design and which will apply to construction of the land disposal facilities.

(f) A description of the construction and operation of the land disposal facility. The description must include the methods of construction; waste emplacement; the procedures for and areas of waste segregation; types of intruder barriers; onsite traffic and drainage systems; survey control program; methods and areas of waste storage; and methods to control surface water and groundwater access to the wastes.

(g) A description of the disposal site closure plan, including those design features which are intended to facilitate disposal site closure and to eliminate the need for ongoing active maintenance.

(h) An identification of the natural resources at the disposal site, the exploitation of which could result in inadvertent intrusion into the low-level wastes after removal of active institutional control.

(i) A description of the kind, amount, classification and specifications of the radioactive material proposed to be received, possessed, and disposed of at the land disposal facility.

(j) A description of the quality assurance program for the determination of natural disposal site characteristics and for quality assurance during the design, construction, and operation of the land disposal facility and the receipt, handling, and emplacement of waste. Audits and managerial controls must be included.

(k) A description of the radiation safety program for control and monitoring radioactive effluents and occupational radiation exposure to demonstrate compliance with the requirements of Part 20 of this chapter and to control contamination of personnel, vehicles, equipment, buildings, and the disposal site. Both routine operations and accidents must be addressed. The program description must include procedures, instrumentation, facilities, and equipment.

(l) A description of the environmental monitoring program to provide data to evaluate potential health and environmental impacts and the plan for taking corrective measures if migration of radionuclides is indicated.

(m) A description of the administrative procedures that the applicant will apply to control activities at the land disposal facility.

§ 61.13 Technical analyses.

The specific technical information must also include the following analyses needed to demonstrate that the performance objectives of Subpart C of this part will be met:

(a) Pathways analyzed in demonstrating protection of the general population from releases of radioactivity including air, soil, groundwater, surface water, plant uptake, and exhumation by burrowing animals. For near-surface disposal, the groundwater pathway will generally be the most significant in terms of releases of radioactivity. The migration analyses must clearly identify and differentiate between the roles

performed by the natural disposal site characteristics and design features in isolating and segregating the wastes. The analyses must clearly demonstrate that there is reasonable assurance that the exposures to humans from the migration of radioactivity will not exceed the limits set forth in § 61.41.

(b) Analyses of the protection of individuals from inadvertent intrusion must include demonstration that the waste classification and segregation requirements will be met and that adequate barriers to inadvertent intrusion will be provided.

(c) Analyses of the protection of individuals during operations must include assessments of expected exposures due to routine operations and likely accidents during handling, storage, and disposal of waste. The analyses must provide reasonable assurance that exposure will be controlled to meet the requirements of Part 20 of this chapter.

(d) Analyses of the long-term stability of the disposal site and the need for ongoing active maintenance after closure must be based upon analyses of active natural processes such as erosion, mass wasting, slope failure, settlement of wastes and backfill, infiltration through covers over disposal areas and adjacent soils and surface drainage of the disposal site. The analyses must provide reasonable assurance that there will not be a need for ongoing active maintenance of the disposal site following closure.

§ 61.14 Institutional information.

The institutional information must include:

(a) A certification by the Federal or State government agency which owns the disposal site that the agency is prepared to accept transfer of the license when the provisions of § 61.30 are met, and will assume responsibility for custodial care after site closure and post closure observation and maintenance.

(b) Where the proposed disposal site is on land not owned by the Federal or a State government, the applicant must submit evidence that arrangements have been made for assumption of ownership in fees by the Federal or a State government before the Commission issues a license.

§ 61.15 Financial information.

The financial information must be sufficient to demonstrate that the financial qualifications of the applicant are adequate to carry out the activities for which the license is sought and meet other financial assurance requirements as specified in Subpart E of this part.

§ 61.16 Other information.

Depending upon the nature of the wastes to be disposed of, and the design and proposed operation of the land disposal facility, additional information may be requested by the Commission including the following:

(a) Physical security measures, if appropriate. Any application to receive and possess special nuclear material in quantities subject to the requirements of Part 73 of this chapter shall demonstrate how the physical security requirements of Part 73 will be met. In determining whether receipt and possession will be subject to the requirements of Part 73, the applicant does not need to consider materials after disposal.

(b) Information concerning criticality, if appropriate.

(1) Any applicant to receive and possess special nuclear material in quantities that would be subject to the requirements of § 70.24, "Criticality accident requirements" of Part 70 of this chapter shall demonstrate how the requirements of this section will be met. In determining whether receipt and possession would be subject to the requirements of § 70.24, the applicant does not need to consider the quantity of special nuclear material that has been disposed.

(2) Any application to receive and possess special nuclear material shall describe procedures and provisions for criticality control which address both storage of special nuclear material prior to disposal and waste emplacement for disposal.

§ 61.20 Filing and distribution of application.

(a) An application for a license under this part, and any amendments thereto, shall be filed with the Director, must be signed by the applicant or the applicant's authorized representative, under oath and must consist of 1 signed original and 2 copies.

(b) Another 85 copies of the application and environmental report must be retained by the applicant for distribution in accordance with written instructions from the Director or designee.

(c) *Fees.* Application, amendment, and inspection fees applicable to a license covering the receipt and disposal of radioactive wastes in a land disposal facility are required by Part 170 of this chapter.

§ 61.21 Elimination of repetition.

In its application or environmental report, the applicant may incorporate by reference information contained in previous applications, statements, or reports filed with the Commission if these references are clear and specific.

§ 61.22 Updating of application and environmental report.

(a) The application and environmental report must be as complete as possible in the light of information that is available at the time of submittal.

(b) The applicant shall supplement its application or environmental report in a timely manner, as necessary, to permit the Commission to review, prior to issuance of a license, any changes in the activities proposed to be carried out or new information regarding the proposed activities.

§ 61.23 Standards for issuance of a license.

A license for the receipt, possession, and disposal of waste containing or contaminated with source, special nuclear, or byproduct material will be issued by the Commission upon finding that the issuance of the license will not be inimical to the common defense and security and will not constitute an unreasonable risk to the health and safety of the public, and:

(a) The applicant is qualified by reason of training and experience to carry out the disposal operations requested in a manner that protects health and minimizes danger to life or property.

(b) The applicant's proposed disposal site, disposal design, land disposal facility operations (including equipment, facilities, and procedures), disposal site closure, and postclosure institutional care are adequate to protect the public health and safety in that they provide reasonable assurance that the general population will be protected from releases of radioactivity as specified in the performance objective in § 61.41.

(c) The applicant's proposed disposal site, disposal site design, land disposal facility operations (including equipment, facilities, and procedures), disposal site closure, and postclosure institutional care are adequate to protect the public health and safety in that they provide reasonable assurance that doses to individual inadvertent intruders should not exceed the dose limits established in the performance objective in § 61.42.

(d) The applicant's proposed land disposal facility operations, including equipment, facilities, and procedures, are adequate to protect the public health and safety in that they provide reasonable assurance that the standards for radiation protection set out in Part 20 of this chapter will be met.

(e) The applicant's proposed disposal site, disposal site design, land disposal

facility operations, disposal site closure, and postclosure institutional care are adequate to protect the public health and safety in that they provide reasonable assurance of long-term stability of the disposed waste and the disposal site and should eliminate the need for ongoing active maintenance of the disposal site following closure.

(f) There is adequate demonstration that the applicable technical requirements of Subpart D of this part will be met.

(g) Institutional care is assured for the length of time found necessary to assure the findings in paragraphs (b)–(e) of this section and that the institutional care meets the requirements of §§ 61.59 and 61.60.

(h) The information on financial assurances meets the requirements of subpart E of this part.

(i) The applicant has demonstrated compliance with the requirements of Part 73 of this chapter, insofar as they are applicable to special nuclear material to be possessed under the license.

(j) The applicant has demonstrated compliance with the requirements of § 70.24 of Part 70 of this chapter, insofar as they are applicable to special nuclear material to be possessed under the license.

(k) Any additional information submitted as requested by the Commission pursuant to § 61.16 is adequate.

(l) The requirements of Part 51 of this chapter have been met.

§ 61.24 Conditions of licenses.

(a) A license issued under this part, or any right thereunder, may be transferred, assigned, or in any manner disposed of, either voluntarily, directly or indirectly, through transfer of control of the license to any person, only if the Commission finds, after securing full information, that the transfer is in accordance with the provisions of the Atomic Energy Act and gives its consent in writing in the form of a license amendment.

(b) The licensee shall submit written statements under oath upon request of the Commission, at any time before termination of the license, to enable the Commission to determine whether or not the license should be modified, suspended, or revoked.

(c) The license will be terminated only on the full implementation of the final closure plan as approved by the Commission, including postclosure observation and maintenance.

(d) The licensee shall be subject to the provisions of the Atomic Energy Act now or hereafter in effect, and to all rules, regulations, and orders of the Commission. The terms and conditions of the license are subject to amendment, revision, or modification, by reason of amendments to, or by reason of rules, regulations, and orders issued in accordance with the terms of the Atomic Energy Act.

(e) Any license may be revoked, suspended or modified in whole or in part for any material false statement in the application or any statement of fact required under Section 182 of the Act, or because of conditions revealed by any application or statement of fact or any report, record, or inspection or other means which would warrant the Commission to refuse to grant a license to the original application, or for failure to operate the facility in accordance with the terms of the license, or for any violation of, or failure to observe any of the terms and conditions of the Act, or any regulation, license or order of the Commission.

(f) Each person licensed by the Commission pursuant to the regulations in this part shall confine possession and use of materials to the locations and purposes authorized in the license.

(g) No radioactive waste may be disposed of until the Commission has inspected the land disposal facility and has found it to be in conformance with the description, design, and construction described in the application for a license.

(h) The Commission may incorporate in any license at the time of issuance, or thereafter, by appropriate rule, regulation or order, additional requirements and conditions with respect to the licensee's receipt, possession, and disposal of source, special nuclear or byproduct material as it deems appropriate or necessary in order to:

(1) Promote the common defense and security;

(2) Protect health or to minimize danger to life or property;

(3) Require such reports and the keeping of records, and to provide for such inspections of activities under the license that may be necessary or appropriate to effectuate the purposes of the Act and regulations thereunder.

(i) Any licensee who receives and possesses special nuclear material under this part in quantities that would be subject to the requirements of § 70.24 of Part 70 of this chapter shall comply with the requirements of that section. The licensee does not need to consider the quantity of materials which it has disposed.

§ 61.25 Changes.

(a) Except as provided for in specific license conditions, the licensee shall not make changes in the land disposal facility or procedures described in the license application. The license will include conditions restricting subsequent changes to the facility and the procedures authorized. These restrictions will fall into three categories of descending importance to public health and safety as follows: (1) those features and procedures which may not be changed without (i) 60 days prior notice to the Commission, (ii) 30 days notice of opportunity for a prior hearing, and (iii) prior Commission approval; (2) those features and procedures which may not be changed without (i) 60 days prior notice to the Commission, and (ii) prior Commission approval; and (3) those features and procedures which may not be changed without 60 days prior notice to the Commission. Features and procedures falling in paragraph (a)(3) of this section may not be changed without prior Commission approval if the Commission, after having received the required notice, so orders.

(b) Amendments authorizing license renewal, site closure, license transfer, or license termination shall be included in paragraph (a)(1) of this section.

§ 61.26 Amendment of license.

(a) An application for amendment of license must be filed in accordance with § 61.20 and shall fully describe the changes desired.

(b) In determining whether an amendment to a license will be approved, the Commission will apply the criteria set forth in § 61.23.

§ 61.27 Application for renewal or closure.

(a) Any expiration date on a license applies only to the above ground activities and to the authority to dispose of waste. Failure to renew the license in no way relieves the licensee of responsibility for carrying out site closure, postclosure observation and transfer of the license to the site owner. An application for renewal or an application for closure under § 61.28 must be filed at least 30 days prior to license expiration.

(b) Applications for renewal of a license must be filed in accordance with §§ 61.10 through 61.16 and 61.20. Applications for closure must be filed in accordance with §§ 61.20 and 61.28. Information contained in previous applications, statements or reports filed with the Commission under the license may be incorporated by reference if the references are clear and specific.

(c) In any case in which a licensee has timely filed an application for renewal of a license, the license for continued receipt and disposal of licensed materials does not expire until the Commission has taken final action on the application for renewal.

(d) In determining whether a license will be renewed, the Commission will apply the criteria set forth in § 61.23.

§ 61.28 Content of application for closure.

(a) Prior to final closure of the disposal site, or as otherwise directed by the Commission, the applicant shall submit an application to amend the license for closure. This closure application must include a final revision and specific details of the disposal site closure plan included as part of the license application submitted under § 61.12(g) that includes each of the following:

(1) Any additional geologic, hydrologic, or other disposal site data pertinent to the long-term containment of emplaced radioactive wastes obtained during the operational period.

(2) The results of tests, experiments, or any other analyses relating to backfill of excavated areas, closure and sealing, waste migration and interaction with emplacement media, or any other tests, experiments, or analysis pertinent to the long-term containment of emplaced waste within the disposal site.

(3) Any proposed revision of plans for:

(i) Decontamination and/or dismantlement of surface facilities;

(ii) Backfilling of excavated areas; or

(iii) Stabilization of the disposal site for post-closure care.

(4) Any significant new information regarding the environmental impact of closure activities and long-term performance of the disposal site.

(b) Upon review and consideration of an application to amend the license for closure submitted in accordance with paragraph (a) of this section, the Commission shall issue an amendment authorizing closure if there is reasonable assurance that the long-term performance objectives of Subpart C of this part will be met.

§ 61.29 Post-closure observation and maintenance.

Following completion of closure authorized in § 61.28, the licensee shall observe, monitor, and carry out necessary maintenance and repairs at the disposal site until the site closure is complete and the license is transferred by the Commission in accordance with § 61.30. Responsibility for the disposal site must be maintained by the licensee for a minimum of 5 years.

§ 61.30 Transfer of license.

(a) Following closure and the period of post-closure observation and maintenance, the licensee may apply for an amendment to transfer the license to the disposal site owner. The license shall be transferred when the Commission finds:

(1) That the closure of the disposal site has been made in conformance with the licensee's disposal site closure plan, as amended and approved as part of the license;

(2) That reasonable assurance has been provided by the licensee that the performance objectives of Subpart C of this part are met;

(3) That any funds and necessary records for care will be transferred to the disposal site owner;

(4) That the post-closure monitoring program is operational for implementation by the disposal site owner; and

(5) That the Federal or State government agency which will assume responsibility for custodial care of the disposal site is prepared to assume responsibility and assure that the institutional requirements found necessary under § 61.23(g) will be met.

§ 61.31 Termination of license.

(a) Following any period of custodial care needed to meet the requirements found necessary under § 61.23, the licensee may apply for an amendment to terminate the license.

(b) This application must be filed, and will be reviewed, in accordance with the provision of § 61.20 and of this section.

(c) A license is terminated only when the Commission finds:

(1) That the institutional care requirements found necessary under § 61.23(g) have been met; and

(2) That any additional requirements resulting from new information developed during the custodial period have been met.

Subpart C—Performance Objectives

§ 61.40 General requirement.

Land disposal facilities must be sited, designed, operated, closed, and controlled after closure so that reasonable assurance exists that exposures to humans are within the limits established in the performance objectives in §§ 61.41 through 61.44.

§ 61.41 Protection of the general population from releases of radioactivity.

Concentrations of radioactive material which may be released to the general environment in ground water, surface water, air, soil, plants, or animals must not result in an annual dose exceeding an equivalent of 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other organ of any member of the public. In addition, concentrations of radioactive material in groundwater must not exceed the maximum contaminant levels established in the National Primary Drinking Water Standards (40 CFR Part 141) at the nearest public drinking water supply (a limit of 10 pCi/1 above background must be used for uranium and thorium).

§ 61.42 Protection of individuals from inadvertent intrusion.

Design operation and closure of the land disposal facility must not result in conditions where any individual inadvertently intruding into the disposal site and occupying the site or contacting the waste after active institutional controls over the disposal site are removed, could receive a dose to the whole body in excess of 500 millirem per year.

§ 61.43 Protection of individuals during operations.

Operations at the land disposal facility must be conducted in compliance with the standards for radiation protection set out in Part 20 of this chapter.

§ 61.44 Stability of the disposal site after closure.

The disposal facility must be designed, used, operated, and closed to achieve long-term stability of the disposed waste and the disposal site and to eliminate the need for ongoing active maintenance of the disposal site following closure so that only surveillance, monitoring, or minor custodial care are required.

Subpart D—Technical Requirements for Land Disposal Facilities

§ 61.50 Disposal site suitability requirements for land disposal.

(a) Disposal site suitability for near-surface disposal.

(1) The purpose of this section is to specify the minimum characteristics a disposal site must have to be acceptable for use as a near-surface disposal site. The primary emphasis in disposal site suitability is given to isolation of wastes, a matter having long-term impacts, and to disposal site features that assure that the long-term performance objectives of Subpart C of this part are met, as opposed to short-term convenience or benefits.

(2) The disposal site shall be capable of being characterized, modeled, analyzed and monitored.

(3) Within the region or state where the facility is to be located, a disposal site should be selected so that projected population growth and future developments are not likely to affect the ability of the disposal facility to meet the performance objectives of Subpart C of this part.

(4) Areas must be avoided having economically significant natural resources which, if exploited, would result in failure to meet the performance objectives of Subpart C of this part.

(5) The disposal site must be generally well drained and free of areas of flooding or frequent ponding. Waste disposal shall not take place in a 100-year flood plain, coastal high-hazard area or wetland.

(6) Upstream drainage areas must be minimized to decrease the amount of runoff which could erode or inundate waste disposal units.

(7) The disposal site must provide sufficient depth to the water table that ground water intrusion, perennial or otherwise, into the waste will not occur. The Commission will consider exceptions to this requirement if it can be conclusively shown that disposal site characteristics will result in diffusion being the predominant means of radionuclide movement and the rate of movement will result in the performance objectives of Subpart C of this part being met.

(8) Any groundwater discharge to the surface within the disposal site must not originate within the hydrogeologic unit used for disposal.

(9) Areas must be avoided where tectonic processes such as faulting, folding, seismic activity, or vulcanism may occur with such frequency and extent to significantly affect the ability of the disposal site to meet the performance objectives of Subpart C, of this part or may preclude defensible modeling and prediction of long-term impacts.

(10) Areas must be avoided where surface geologic processes such as mass wasting, erosion, slumping, landsliding, or weathering occur with such frequency and extent to significantly affect the ability of the disposal site to meet the performance objectives of Subpart C, of this part or may preclude defensible modeling and prediction of long-term impacts.

(11) The disposal site must not be located where nearby facilities or activities could adversely impact the ability of the site to meet the performance objectives of Subpart C of this part or significantly mask the environmental monitoring program.

(b) Disposal site suitability requirements for land disposal other than near-surface (reserved).

§ 61.51 Disposal site design for land disposal.

(a) Disposal site design for near-surface disposal.

(1) Site design features must be directed toward long-term isolation and avoidance of the need for continuing active maintenance.

(2) The disposal site design and operation must be compatible with the disposal site closure and stabilization plan and lead to disposal site closure that provides reasonable assurance that the performance objectives of Subpart C of this part will be met.

(3) The disposal site must be designed to complement and improve the ability of the disposal site's natural characteristics to assure that the performance objectives of Subpart C of this part will be met.

(4) Covers must be designed to prevent water infiltration, to direct precolating or surface water away from the buried waste, and to resist degradation by surface geologic processes and biotic activity.

(5) Surface features must direct surface water drainage away from disposal units at velocities and gradients which will not result in erosion that will require ongoing active maintenance in the future.

(6) The disposal site must be designed to eliminate the contact of water with waste during storage, the contact of standing water with waste during disposal, and the contact of percolating or standing water with wastes after disposal.

(7) The disposal site shall be used exclusively for the disposal of radioactive wastes.

(b) Disposal site design for other than near-surface disposal (reserved).

§ 61.52 Land disposal facility operation and disposal site closure.

(a) Near-surface disposal facility operation and disposal site closure.

(1) Wastes designated as Class A segregated, pursuant to § 61.55, must be segregated from other wastes by placing in disposal units which are sufficiently separated from other units so that there is no interaction between them.

(2) Wastes designated as Class B stable, pursuant to § 61.55, shall be disposed of in accordance with the requirements of paragraphs (a)(4) through (10) of this section.

(3) Wastes designated as Class C intruder, pursuant to § 61.55, must be disposed of so that the top of the waste is a minimum of 5 meters below the surface of the cover or must be disposed of with natural or engineered barriers that are designed to protect against an inadvertent intrusion for at least 500 years.

(4) Wastes must be emplaced in an orderly manner that maintains the package integrity during emplacement and disposal.

(5) Void spaces between waste packages must be filled with earth or other material to reduce future subsidence within the fill.

(6) Waste must be placed and covered in a manner that limits the gamma radiation at the surface of the cover to levels that are within a few percent above the natural background levels of the site.

(7) The boundaries and locations of each disposal unit (e.g., trenches) must be accurately located and mapped by means of a land survey. Near-surface disposal units must be marked in such a way that the boundaries of each unit can be easily defined. Three permanent survey marker control points, referenced to United States Geological Survey (USGS) or National Geodetic Survey (NGS) survey control stations, must be established on the site to facilitate surveys. The USGS or NGS control stations must provide horizontal and vertical controls as checked against USGS or NGS record files.

(8) A buffer zone of land must be maintained between any buried waste and the disposal site boundary. The buffer zone shall extend at least 100 feet outward from the outermost waste disposal units.

(9) Adequate closure and stabilization measures must be carried out as each disposal unit (e.g., each trench) is filled and covered.

(10) Active waste disposal operations must not have an adverse effect on completed closure and stabilization measures.

(b) Facility operations and disposal site closure for land disposal facilities other than near-surface (reserved).

§ 61.53 Environmental monitoring.

(a) At the time a license application is submitted, the applicant shall have conducted a preoperational monitoring program to provide basic environmental data on the disposal site characteristics. The applicant shall obtain information about the ecology, meteorology, climate, hydrology, geology, and seismology of the disposal site. For those characteristics that are subject to seasonal variation, data must cover at least a twelve month period.

(b) During the land disposal facility site construction and operation, the licensee shall maintain a monitoring program. Measurements and observations must be made and recorded to provide data to evaluate the potential health and environmental impacts during both the construction and the operation of the facility and enable the evaluation of long-term effects and the need for mitigative measures.

(c) After the disposal site is closed, the licensee responsible for post-operational surveillance of the disposal site shall maintain a monitoring system based on the operating history and the closure and stabilization of the disposal site. The monitoring system must be capable of providing early warning of migration of radionuclides from the disposal site.

(d) The licensee must have plans for taking corrective measures if migration of radionuclides would incidate that the performance objectives of Subpart C would not be met.

§ 61.54 Alternative requirements for design and operations.

The Commission may, upon request or on its own initiative, authorize provisions other than those set forth in §§ 61.51 through 61.53 for the segregation and disposal of waste and for the design and operation of a land disposal facility on a specific basis, if it finds reasonable assurance of compliance with the performance objectives of Subpart C of this part.

§ 61.55 Waste classification.

Radioactive wastes are defined to fall within one of the following categories:

(a) *Class A segregated waste* is waste that is segregated at the disposal site and disposed of with only minimum requirements on waste form and characteristics and has the following properties:

(1) the radioisotope concentration does not exceed the values shown in Column 1, Table I, of this section; and

(2) the physical form and characteristics must meet the minimum requirements set forth in § 61.56(a).

(b) *Class B stable waste* is waste that must meet more rigorous requirements on waste form to assure stability after disposal, and has the following properties:

(1) the radioisotope concentration exceeds the concentrations shown in Column 1; and,

Table 1

Isotope	Column 1[1]	Column 2[2]	Column 3[3]
Any with half-life less than 5 years	700	70,000	Theoretical maximum specific activity.
H-3	40	10[6]	Theoretical maximum specific activity.[4]
C-14	0.8	0.8	0.8.[4]
Ni-59	2.2	2.2	2.2.
Co-60	700	70,000	Theoretical maximum specific activity.
Ni-63	3.5	70	70.
Nb-94	0.002	0.002	0.002.
Sr-90	0.04	150	700.
Tc-99	0.3	0.3	0.3.[4]
I-129	0.008	0.008	0.008.[4]
Cs-135	84	84	84.
Cs-137	1.0	44	4600.
Enriched Uranium	0.04	0.04	0.04.
Natural or Depleted uranium	0.05	0.05	0.05.
Alpha-emitting transuranic isotopes			10 nCi/g.
Pu-241			350 n Ci/g.

[1] Maximum concentration for Class A segregated waste. Above this, it is Class B stable waste μCi/cm³.
[2] Concentrations above which some wastes become Class C intruder waste μCi/cm³.
[3] Maximum concentration for any waste class μCi/cm³.
[4] Near-surface disposal facilities will be limited to a specified quantity for the disposal site. This quantity will be determined at the time the license is issued and will be governed largely by the characteristics of the site. Therefore, the total activity of these isotopes in each package of waste must be shown on the shipping manifest (see § 20.311 of this chapter).
For isotopes contained in metals, metal alloys, or permanently fixed on metal as contamination, the values above may be increased by a factor of ten, except natural or depleted uranium which can be the natural specific activity.
For isotopes not listed above, use the values for Sr-90 for beta emitting isotopes with little or no gamma radiation; the values for Cs-137 for beta emitting isotopes with significant gamma radiation; and the values for U-235 for alpha emitting isotopes other than radium.
Wastes containing chelating agents in concentrations greater than 0.1% are not permitted except as specifically approved by the Commission.
For mixtures of the above isotopes, the sum of ratios of an isotope concentration in waste to the concentration in the above table shall not exceed one for any waste class.
Concentrations may be averaged over volume of the package. For a 55 gallon drum multiply the concentration limits by 200,000 to determine allowable total activity.
Until establishment and adoption of other values or criteria, the values in this table (or greater concentrations as may be approved by the Commission in particular cases) shall be used in categorizing waste for near-surface disposal.

(2) The physical form and characteristics of the waste must meet the *minimum* and *stability* requirements set forth in § 61.56.

(c) *Class C intruder waste* is waste that not only must meet more rigorous requirements on waste form to assure stability but also requires special measures at the disposal facility to protect against inadvertent intrusion. This class has the following properties:

(1) The radioisotope concentrations exceed those shown in Column 2; and

(2) The physical form and characteristics meet the *minimum* and *stability* requirements set forth in § 61.56 of this part.

(d) Waste that has a radioisotope concentration that exceeds the values shown in Column 3, Table I of this section, is not generally acceptable for near-surface disposal and shall not be disposed of without specific Commission approval pursuant to § 61.58 of this part.

§ 61.56 Waste characteristics.

(a) The following requirements are *minimum* requirements for all classes of waste and are intended to facilitate handling at the disposal site and provide protection of health and safety.

(1) The waste must be packaged and the waste form and packaging must meet all applicable transportation requirements of the Commission set forth in 10 CFR Part 71 and of the Department of Transportation set forth in 49 CFR Parts 171–179, as applicable.

(2) Wastes must not be packaged for disposal in cardboard or fiberboard boxes.

(3) Waste containing liquids must be packaged in sufficient absorbent material to absorb twice the volume of the liquid.

(4) Waste must not be readily capable of detonation or of explosive decomposition or reaction at normal pressures and temperatures, or of explosive reaction with water.

(5) Waste must not contain, or be capable of generating, quantities of toxic gases, vapors, or fumes harmful to persons transporting, handling, or disposing of the waste.

(6) Wastes must not be pyrophoric. Pyrophoric materials contained in wastes shall be treated, prepared, and packaged to be nonflammable.

(7) Wastes in a gaseous form must be packaged at a pressure that does not exceed one atmosphere at 20° C. Total activity must not exceed 100 curies per container.

(8) Wastes containing biological, pathogenic, or infectious material must be treated to reduce to the maximum extent practicable the potential hazard.

(b) The requirements in this section are intended to provide *stability* of the waste for at least 150 years. Stability is intended to assure that the waste does not degrade and promote slumping, collapse, or other failure of the disposal unit and thereby lead to water infiltration. Stability is also a factor in limiting exposure to an inadvertent

intruder, since it provides a recognizable and nondispersible waste.

(1) Waste must have structural stability. A structurally stable waste form will maintain its physical dimensions within 5% and its form, under the expected disposal conditions of compressive load of 50 psi, and factors such as the presence of moisture, and microbial activity, and internal factors such as as radiation effects and chemical changes. Structural stability can be provided by the waste form itself, processing the waste to a stable form, or placing the waste in a disposal container or structure that provides stability after disposal.

(2) Notwithstanding the provisions in § 61.56(a)(3), liquid wastes, or wastes containing liquid, must be converted into a form that contains as little free standing noncorrosive liquid as is reasonably achievable, but in no case shall the liquid exceed 1% of the volume of the waste.

(3) Void spaces within the waste and between the waste and its package must be reduced to the extent practicable.

§ 61.57 Labeling.

Each package of waste must be clearly labeled to identify whether it is *Class A segregated, Class B stable,* or *Class C intruder,* in accordance with § 61.55.

§ 61.58 Alternative requirements for waste classification and characteristics.

The Commission may, upon request or on its own initiative, authorize other provisions for the classification and characteristics of waste on a specific basis, if, after evaluation, of the specific characteristics of the waste, disposal site, and method of disposal, it finds reasonable assurance of compliance with the performance objectives in Subpart C of this part.

§ 61.59 Institutional requirements.

(a) *Land ownership.* Disposal of radioactive waste received from other persons may be permitted only on land owned in fee by the Federal or a State government.

(b) *Institutional control.* The land owner or custodial agency shall carry out an active institutional control program to physically control access to the disposal site following transfer of control of the disposal site from the disposal site operator. The active control program must also include, but not be limited to, carrying out an environmental monitoring program at the disposal site, periodic suveillance, minor custodial care, and other requirements as determined by the Commission and administration of funds to cover the costs for these activities. The period of active controls will be determined by the Commission, but active controls may not be relied upon for more than 100 years following transfer of control of the disposal site to the owner.

Subpart E—Financial Assurances

§ 61.61 Applicant qualification and assurances.

Each applicant shall show that it either possesses the necessary funds or has reasonable assurance of obtaining the necessary funds, or by a combination of the two, to cover the estimated costs of conducting all licensed activities over the planned operating life of the project, including costs of construction and disposal.

§ 61.62 Funding for disposal site closure and stabilization.

(a) The applicant shall provide assurances prior to the commencement of operations that sufficient funds will be available to carry out disposal site closure and stabilization, including: (1) decontamination or dismantlement of land disposal facility structures; and (2) closure and stabilization of the disposal site so that following transfer of the disposal site to the owner, the need for ongoing active maintenance is eliminated and only minor custodial care, surveillance, and monitoring are required. These assurances shall be based on Commission approved cost estimates reflecting the Commission approved plan for disposal site closure and stabilization. The applicant's cost estimates must take into account total capital costs that would be incurred if an independent contractor were hired to perform the closure and stabilization work.

(b) In order to avoid unnecessary duplication and expense, the Commission will accept financial sureties that have been consolidated with earmarked financial or surety arrangements established to meet requirements of other Federal or State agencies and/or local governing bodies for such decontamination, closure and stabilization. The Commission will accept this arrangement only if they are considered adequate to satisfy these requirements and that the portion of the surety which covers the closure of the disposal site is clearly identified and committed for use in accomplishing these activities.

(c) The licensee's surety mechanism will be reviewed by the Commission annually to assure sufficient funds for completion of the closure plan if the work has to be performed by an independent contractor.

(d) The amount of surety liability should change in accordance with the predicted cost of future closure and stabilization. Factors affecting closure and stabilization cost estimates include: inflation; increases in the amount of disturbed land; changes in engineering plans; closure and stabilization that has already been accomplished and any other conditions affecting costs. This will yield a surety that is at least sufficient at all times to cover the costs of closure of the disposal units that are expected to be used before the next license renewal.

(e) The term of the surety mechanism must be open ended unless it can be demonstrated that another arrangement would provide an equivalent level of assurance. This assurance could be provided with a surety mechanism which is written for a specified period of time (e.g., five years) yet which must be automatically renewed unless the party who issues the surety notifies the beneficiary (the Commission) and the principal (the licensee) not less than 90 days prior to the renewal date of its intention not to renew. In such a situation the licensee must submit a replacement surety within 30 days after notification of cancellation. If the licensee fails to provide a replacement surety acceptable to the Commission, the Commission will collect on the original surety.

(f) Proof of forfeiture must not be necessary to collect the surety so that in the event that the licensee could not provide an acceptable replacement surety within the required time, the surety shall be automatically collected prior to its expiration. The conditions described above would have to be clearly stated on any surety instrument which is not open-ended, and must be agreed to by all parties. Liability under the surety mechanism must remain in effect until the closure and stabilization program has been completed and approved by the Commission and the license has been transferred to the site owner.

(g) Financial surety arrangements generally acceptable to the Commission include: surety bonds, cash deposits, certificates of deposit, deposits of government securities, escrow accounts, irrevocable letters or lines of credit, trust funds, and combinations of the above or such types of arrangements as may be approved by the Commission. However, self-insurance, or any arrangement which essentially constitutes pledging the assets of the licensee, will not satisfy the surety

requirement for private sector applicants since this provides no additional assurance other than that which already exists through license requirements.

§ 61.63 Financial assurances for institutional control.

(a) Prior to the issuance of the license, the applicant shall provide for Commission review and approval a copy of a binding arrangement, such as a lease, between the applicant and the disposal site owner that ensures that sufficient funds will be available to cover the costs of monitoring, and any required maintenance during the institutional control period. The binding arrangement will be reviewed periodically by the Commission to ensure that changes in inflation, technology and disposal facility operations are reflected in the arrangements.

(b) Subsequent changes to the binding arrangement specified in paragraph (a) of this section relevant to institutional control shall be submitted to the Commission for approval.

Subpart F—Participation by State Governments and Indian Tribes

§ 61.70 Scope.

This subpart describes mechanisms through which the Commission will implement a formal request from a State or Tribal government to participate in the review of a license application for a land disposal facility. Nothing in this subpart may be construed to bar the State or tribal-governing body from participating in subsequent Commission proceedings concerning the license application as provided under Federal law and regulations.

§ 61.71 State and tribal government consultation.

Upon request of a State or tribal government body, the Director may make available Commission staff to discuss with representatives of the State or tribal governing body information submitted by the applicant, applicable Commission regulations, licensing procedures, potential schedules, and the type and scope of State activities in the license review permitted by law. In addition, staff will be made available to consult and cooperate with the State or tribal governing body in developing proposals for participation in the license review.

§ 61.72 Filing of proposals for State and tribal participation.

(a) Following publication in the Federal Register of the notice of docketing, but no later than 120 days following docketing of an application submitted under § 61.20, a State or tribal-governing body potentially affected a near-surface disposal facility at the proposed site may submit to the Director a proposal for participation in the review of the license application. A State or tribal governing body may also submit to the Director a proposal for participation in the review of any subsequent application for license renewal or amendment.

(b) Proposals for participation in the licensing process must be made in writing and must be signed by the Governor of the State or the official otherwise provided for by State or Tribal law.

(c) At a minimum, proposals must contain each of the following items of information:

(1) A general description of how the State or tribe wishes to participate in the licensing process specifically identifying those issues it wishes to review.

(2) A description of material and information which the State or tribe plans to submit to the Commission for consideration in the licensing process. A tentative schedule referencing steps in the review and calendar dates for planned submittals should be included.

(3) A description of any work that the State or tribe proposes to perform for the Commission in support of the licensing process.

(4) A description of state or tribal plans to facilitate local government and citizen participation.

(5) A preliminary estimate of the types and extent of impact which the State expects, should be a disposal facility be located as proposed.

(6) If desired, any requests for educational or information services (seminars, public meetings) or other actions from the Commission such as establishment of additional Public Document Rooms or exchange of State personnel under the Intergovernmental Personnel Act.

§ 61.73 Commission approval of proposals.

(a) Upon receipt of a proposal submitted in accordance with § 61.72, the Director will arrange for a meeting between the representatives of the State or tribal governing body and the Commission staff to discuss the proposal and to ensure full and effective participation by the State or tribe in the Commission's license review.

(b) If requested by a State or tribal governing body, the Director may approve all or any part of a proposal if the Director determines that:

(1) The proposed activities are within the scope of Commission statutory responsibility and the type and magnitude of impacts which the State or tribe may bear are sufficient to justify their participation; and

(2) The proposed activities will contribute productively to the licensing review.

(c) The decision of the Director will be transmitted in writing to the Governor or the designated official of the tribal governing body.

(d) Upon the written request of the Governor or the tribal official, any determination of the Director under this section may be reviewed by the Commission.

Subpart G—Records, Reports, Tests, and Inspections

§ 61.80 Maintenance of records, reports, and transfers.

(a) Each licensee shall maintain any records and make any reports in connection with the licensed activities as may be required by the conditions of the license or by the rules, regulations, and orders of the Commission.

(b) Records which are required by the regulations in this Part or by license conditions must be maintained for a period specified by the appropriate regulations in this chapter or by license condition. If a retention period is not otherwise specified, these records must be maintained and transferred as a condition of license termination unless the Commission otherwise authorizes their dispostion.

(c) Records which must be maintained pursuant to this Part may be the original or a reproduced copy of microfilm if this reproduced copy or microfilm is capable of producing a clear and legible copy.

(d) If there is a conflict between the Commission's regulations in this part, license condition, or other written Commission approval or authorization pertaining to the retention period for the same type of record, the longest retention period specified takes precedence.

(e) Notwithstanding paragraphs (a) through (d) of this section, copies of records of the location and the quantity of radioactive wastes contained in the disposal site must be transferred upon license termination to the chief executive of the nearest municipality, the chief executive of the county in which the facility is located, the county zoning board or land development and planning agency, the state governor and other State, local and Federal governmental agencies as designated by

the Commission at the time of license termination.

(f) Each licensee shall comply with the reporting requirements of § 30.55 of this chapter, § 40.64 of this chapter, and § 70.53 and § 70.54 of Part 70 of this chapter if the quantities or activities of materials received or transferred exceed the limits of these sections. Inventory reports are not required for materials after disposal.

(g) Each licensee authorized to dispose of radioactive waste received from other persons, shall, upon each issuance of its annual financial report, if any, including any certified financial statements, file a copy thereof with the Commission in order to update the information base for determining financial qualifications.

(h)(1) Each licensee authorized to dispose of waste materials received from other persons, pursuant to this part, shall submit annual reports to the appropriate Commission regional office shown in Appendix D of Part 20 of this chapter, with copies to the Director of the Office of Inspection and Enforcement and the Director of the Division of Waste Management, USNRC, Washington, D.C. 20555. Reports shall be submitted by the end of the first calendar quarter of each year for the preceding year; (2) the reports shall include (i) specification of the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in airborne effluents during the preceding year, (ii) the results of the environmental monitoring program, (iii) a summary of licensee disposal site maintenance activities, (iv) summary of activities and quantities of radionuclides disposed of, (v) any instances in which observed site characteristics were different from those described in the application for a license, and (vi) any other information the Commission may require. If the quantities of radioactive materials released during the reporting period, monitoring results, or maintenance performed are significantly different from those expected in the materials previously reviewed as part of the licensing action, the report must cover this specifically.

(i) Each licensee shall report in accordance with the requirements of § 70.52 of this chapter.

(j) Any transfer of byproduct, source, and special nuclear materials by the licensee is subject to the requirements in § 30.41 of Part 30 of this chapter, § 40.51 of Part 40 of this chapter, and § 70.42 of Part 70 of this chapter. Byproduct, source and special nuclear material means materials as defined in these Parts, respectively.

§ 61.81 Tests at land disposal facilities.

(a) Each licensee shall perform, or permit the Commission to perform, any tests as the Commission deems appropriate or necessary for the administration of the regulations in this Part, including tests of:

(1) Radioactive wastes and facilities used for the receipt, storage, treatment, handling and disposal of radioactive wastes;

(2) Radiation detection and monitoring instruments; and

(3) Other equipment and devices used in connection with the receipt, possession, handling, treatment, storage, or disposal of radioactive waste.

§ 61.82 Commission inspections of land disposal facilities.

(a) Each licensee shall afford to the Commission at all reasonable times opportunity to inspect radioactive waste and the premises, equipment, operations, and facilities in which radioactive wastes are received, possessed, handled, treated, stored, or disposed.

(b) Each licensee shall make available to the Commission for inspection, upon reasonable notice, records kept by it pursuant to the regulations in this chapter. Authorized repesentatives of the Commission may copy, for the Commission's use, any record required to be kept pursuant to this part.

§ 61.83 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Atomic Energy Act of 1954, as amended, or any regulation or order issued thereunder. A court order may be obtained for the payment of a civil penalty imposed pursuant to section 234 of the Act for violation of section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Act, or section 206 of the Energy Reorganization Act of 1974, or any rule.

The following amendments are also made to existing parts of the regulations in this chapter.

PART 2—RULES OF PRACTICE

2. In § 2.101, paragraph (a)(2), (b), and (d) are revised to read as follows:

§ 2.101 Filing of application.

(a) * * *

(2) Each application for a license for a facility will be assigned a docket number. However, to allow a determination as to whether an application for a construction permit or operating license for a production or utilization facility is complete and acceptable for docketing, it will be initially treated as a tendered application after it is received and a copy of the tendered application will be available for public inspection in the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. Generally, that determination will be made within a period of thirty (30) days.

* * * * *

(b) Each application for a license to receive radioactive waste from other persons for disposal under Part 61 of this chapter and the accompanying environmental report shall be processed in accordance with the provisions of this paragraph.

(1) To allow a determination as to whether the application or environmental report is complete and acceptable for docketing, it will be initially treated as a tendered document and a copy will be available for public inspection in the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. One original and two copies shall be filed to enable this determination to be made.

(i) Upon receipt of a tendered application, the Commission will publish in the Federal Register notice of the filed application and will notify the governors, legislatures and other appropriate State, county, and muncipal officials and tribal governing bodies of the States and areas containing or potentially affected by the activities at the proposed site and the alternative sites. The Commission will inform these officials that the Commission staff will be available for consultation pursuant to § 61.71 of this chapter. The Federal Register notice will note the opportunity for interested persons to submit views and comments on the tendered application for consideration by the Commission and applicant.

(ii) The Commission will also post a public notice in a newspaper or newspapers of general circulation in the affected States and areas summarizing information contained in the applicant's tendered application and noting the opportunity to submit views and comments.

(iii) When the Director of Nuclear Material Safety and Safeguards determines that the tendered document is complete and acceptable for docketing, a docket number will be assigned and the applicant will be notified of the determination. If it is determined that all or any part of the tendered document is incomplete and therefore not acceptable for processing, the applicant will be informed of this determination and the aspects in which the document is deficient.

(2) With respect to any tendered document that is acceptable for

docketing, the applicant will be requested to (i) submit to the Director of Nuclear Material Safety and Safeguards such additional copies as the regulations in Parts 61 and 51 of this chapter require, (ii) serve a copy on the chief executive of the municipality in which the waste is to be disposed of or, if the waste is not to be disposed of within a municipality, serve a copy on the chief executive of the county in which the waste is to be disposed of (iii) make direct distribution of additional copies to Federal, State, Indian Tribe, and local officials in accordance with the requirements of this chapter and written instructions from the Director of Nuclear Material Safety and Safeguards and (iv) serve a notice of availability of the application and environmental report on the chief executives or governing bodies of the municipalities or counties which have been identified in the application and environmental report as the location of all or part of the alternative sites if copies are not distributed under paragraph (b)(2)(iii) of this section to the executives or bodies. All distributed copies shall be completely assembled documents identified by docket number. Subsequently distributed amendments, however, may include revised pages to previous submittals and, in such cases, the recipients will be responsible for inserting the revised pages. In complying with the requirements of paragraph (b) of this section the applicant shall not make public distribution of those parts of the application subject to § 2.790(d).

(3) The tendered document will be formally docketed upon receipt by the Director of Nuclear Material Safety and Safeguards of the required additional copies. Distribution of the additional copies shall be deemed to be complete as of the time the copies are deposited in the mail or with a carrier prepaid for delivery to the designated addressees. The date of docketing shall be the date when the required copies are received by the Director of Nuclear Material Safety and Safeguards. Within ten (10) days after docketing, the applicant shall submit to the Director of Nuclear Material Safety and Safeguards a written statement that distribution of the additional copies to Federal, State, Indian Tribe, and local officials has been completed in accordance with requirements of this section and written instructions furnished to the applicant by the Director of Nuclear Material Safety and Safeguards.

(4) Amendments to the application and environmental report shall be filed and distributed and a written statement shall be furnished to the Director of Nuclear Material Safety and Safeguards in the same manner as for the initial application and environmental report.

(5) The Director of Nuclear Material Safety and Safeguards will cause to be published in the Federal Register a notice of docketing which identifies the State and location of the proposed waste disposal facility and will give notice of docketing to the governor of that State and other officials listed in paragraph (b)(3) of this section and, in a reasonable period thereafter, publish in the Federal Register a notice pursuant to § 2.105 offering opportunity for a hearing to the applicant and other affected persons.

* * * * *

(d) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will give notice of the docketing of the public health and safety, common defense and security, and environmental parts of an application for a license for a facility to the Governor or other appropriate official of the State in which the facility is to be located or the activity is to be conducted and will cause to be published in the Federal Register a notice of docketing of the application which states the purpose of the application and specifies the location at which the proposed activity would be conducted.

* * * * *

3. Section 2.103(a) is revised to read as follows:

§ 2.103 Action on applications for byproduct, source, special nuclear material, and operator licenses.

(a) If the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, finds that an application for a byproduct, source, special nuclear material, or operator license complies with the requirements of the Act, the Energy Reorganization Act, and this chapter, he will issue a license. If the license is for a facility or if it is to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, will inform the State, Indian Tribe, and local officials specified in § 2.104(e) of the issuance of the license.

* * * * *

4. Section 2.104(e) is revised to read as follows:

§ 2.104 Notice of hearing.

* * * * *

(e) The Secretary will give timely notice of the hearing to all parties and to other persons, if any, entitled by law to notice. The Secretary will transmit a notice of hearing on an application for a facility license or for a license for receipt of waste radioactive material from other persons for the purpose of disposal under Part 61 of this chapter or for a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter to the governor or other appropriate official of the State and to the chief executive of the municipality in which the facility is to be located or the activity is to be conducted or, if the facility is not to be located or the activity conducted within a municipality, to the chief executive of the county (or to the Tribal organization, if it is to be so located or conducted within an Indian reservation).

5. Section 2.105(a)(2) is revised to read as follows:

§ 2.105 Notice of proposed action.

(a) * * *

(2) A license for receipt of waste radioactive material from other persons for disposal by the waste disposal licensee under Part 61 of this chapter.

* * * * *

6. Section 2.106 is amended by adding a new paragraph (d) to read as follows:

§ 2.106 Notice of issuance.

* * * * *

(d) The Director of Nuclear Material Safety and Safeguards will also cause to be published in the Federal Register notice of, and will inform the State and local officials or tribal governing body specified in § 2.104(e) of any licensing action with respect to a license to receive radioactive waste from other persons for disposal under Part 61 of this chapter or the amendment of such a license for which a notice of proposed action has been previously published.

7. Section 2.764 is amended by adding a new paragraph (e), and by revising paragraphs (a) and (b) to read:

§ 2.764 Immediate effectiveness of initial decision directing issuance or amendment of construction permit or operating license.[1]

(a) Except as provided in paragraphs (c), (d), and (e) of this section, an initial decision directing the issuance or amendment of a construction permit, a construction authorization, or an operating license shall be effective immediately upon issuance unless the presiding officer finds that good cause has been shown by a party why the initial decision should not become

immediately effective, subject to the review thereof and further decision by the Commission upon exceptions filed by any party pursuant to § 2.762 or upon its own motion.

(b) Except as provided in paragraphs (c), (d), and (e) of this section, the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, notwithstanding the filing of exceptions, shall issue a construction permit, a construction authorization, or an operating license, or amendments thereto, authorized by an initial decision, within ten (10) days from the date of issuance of the decision.

* * * * *

(e) An initial decision directing the issuance of a license under Part 61 of this chapter (relating to land disposal of radioactive waste) or any amendment to such a license authorizing actions which may significantly affect the health and safety of the public, shall become effective only upon order of the Commission. The Director of Nuclear Material Safety and Safeguards shall not issue a license under Part 61 of this chapter, or any amendment to such a license which may significantly affect the health and safety of the public, until expressly authorized to do so by the Commission.

PART 19—NOTICES, INSTRUCTIONS, AND REPORTS TO WORKERS; INSPECTIONS

§ 19.2 [Amended]

8. Section 19.2 is amended by adding "61." following "40, 60."

§ 19.3 [Amended]

9. In § 19.3, paragraph (d) is amended by adding "61." following "40, 60."

PART 20—STANDARDS FOR PROTECTION AGAINST RADIATION

§ 20.2 [Amended]

10. Section 20.2 is amended by adding "61." following "40, 60."

§ 20.3 [Amended]

11. In § 20.3, paragraph (a)(9) is amended by adding "61." following "40, 60."

12. In § 20.301, paragraph (a) is amended by adding "61." following "40, 60." and paragraph (b) is revised to read as follows:

§ 20.301 General requirement.

* * * * *

(b) As authorized under § 20.302 or Part 61 of this chapter; or

* * * * *

§ 20.302 [Amended]

13. In § 20.302, paragraph (b) is removed.

14. A new § 20.311 is added to read as follows:

§ 20.311 Transfer for disposal and manifests.

(a) *Purpose.* The requirements of this section are designed to control transfers and establish a manifest tracking system and supplement existing requirements concerning transfers and recordkeeping.

(b) Each shipment of radioactive waste to a licensed land disposal facility must be accompanied by a shipment manifest that contains the name, address, and telephone number of the person generating the waste as well as the name, address, and telephone number of the person transporting the waste to the land disposal facility. The manifest must also indicate as completely as practicable: the type of waste; the waste volume and mass; radionuclide identity and concentration; total radioactivity; and chemical form. The solidification agent must be specified. Wastes classified as Class A segregated, Class B stable, or Class C intruder in § 61.55 of this part chapter must be clearly identified as such in the manifest. The total quantity of noted isotopes identified in Table 1, Part 61 of this chapter must be shown.

(c) Each manifest must include a certification by the waste generator that the transported materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the Commission. An authorized representative of the waste generator shall sign and date the manifest.

(d) Any generating licensee who transfers radioactive waste to a land disposal facility or a licensed waste collector or processor shall:

(1) Prepare all wastes so that the waste is classified according to § 61.55 and meets the waste characteristics requirements in § 61.56 of this chapter;

(2) Label each package of waste to identify whatever it is, Class A segregated, Class B stable, or Class C intruder waste, in accordance with § 61.55 of this chapter;

(3) Conduct a quality assurance program to assure compliance with §§ 61.55 and 61.56 of this chapter; the program must include management audits;

(4) Prepare shipping manifests to meet the requirements of §§ 20.311 (b) and (c) of this part;

(5) Forward a copy of the manifest to the intended recipient, at the time of shipment;

(6) Include one copy of the manifest with the shipment;

(7) Retain a copy of the manifest until receipt of waste is acknowledged; and,

(8) Investigate late or missing shipments or any part of a shipment in accordance with paragraph (h) of this section.

(e) Any waste collector licensee who handles only prepackaged waste shall:

(1) Acknowledge receipt of the waste from the generator within one week of receipt;

(2) Prepare a new manifest to reflect consolidated shipments; the new manifest shall serve as a listing or index for the detailed generator manifests. Copies of the generator manifests shall be a part of the new manifest. The collector licensee shall certify that nothing has been done to the waste which would invalidate the generator's certification;

(3) Forward a copy of the new manifest to the land disposal facility operator at the time of shipment;

(4) Include the new manifest with the shipment to the disposal site;

(5) Retain a copy of the manifest until receipt of waste is acknowledged; and

(6) Investigate late or missing shipments or any part of a shipment in accordance with paragraph (h) of this section.

(f) Any licensed waste processor who treats or repackages wastes shall:

(1) Acknowledge receipt of the waste from the generator within one week of receipt;

(2) Prepare a new manifest that meets the requirements of paragraphs (b) and (c) of this section. Preparation of the new manifest reflects that the processor is responsible for the waste;

(3) Prepare all wastes so that the waste is classified according to § 61.55 and meets the waste characteristics requirements in § 61.56 of this chapter;

(4) Label each package of waste to identify whatever it is, Class A segregated, Class B stable, or Class C intruder waste, in accordance with § 61.55 of this chapter;

(5) A quality assurance program shall be conducted to assure compliance with §§ 61.55 and 61.56 of this chapter. The program shall include management audits;

(6) Forward a copy of the new manifest to the disposal site operator or waste collector at the time of shipment;

(7) Include the new manifest with the shipment;

(8) Retain copies of original manifests and new manifests until receipt of the wastes is acknowledged; and

(9) Investigate late or missing shipments in accordance with paragraph (h) of this section.

(g) The land disposal facility operator shall:

(1) Acknowledge to the shipper receipt of the waste within one week of receipt. The shipper to be notified is the licensee who last possessed the waste and transferred the waste to the operator;

(2) Following receipt and acceptance of a shipment of radioactive waste accompanied by a manifest, record on the shipment manifest the date of receipt of the waste, the date of disposal of the waste, the location in the disposal site, the condition of the waste packages as received, and any evidence of leaking or damaged packages or radiation or contamination levels in excess of limits specified in DOT and Commission regulations. The licensee shall also briefly describe any repackaging operations of any of the waste packages included in the shipment, plus any other information required by the Commission as a license condition;

(3) Sign, date, and certify that the transported materials have been received, classified, handled, stored, and disposed of in compliance with Commission regulations and all license conditions;

(4) Maintain copies of all completed manifests until the Commission authorizes their disposition at transfer; and

(5) Notify the shipper (i.e., the generator, the collector, or processor) and the Director of the nearest Commission Inspection and Enforcement Regional Office listed in Appendix D of this part when a shipment has not arrived within 60 days after the advance manifest was received.

(h) Late or missing shipments must:

(1) Be investigated by the shipper if the shipper has not received notification of receipt within 20 days after transfer; and

(2) Be traced and reported. The investigation shall include tracing the shipment and filing a report with the nearest Commission Inspection and Enforcement Regional Office listed in Appendix D of this part. Each licensee who conducts a trace investigation shall file a written report with the nearest Commission's Regional office within 2 weeks of completion of the investigation.

15. In § 20.401, paragraphs (b) and (c)(3) are revised to read as follows:

§ 20.401 Records of surveys, radiation monitoring, and disposal.

* * * * *

(b) Each licensee shall maintain records in the same units used is this part, showing the results of surveys required by § 20.301(b), monitoring required by §§ 20.205(b) and 20.205(c) and disposals made under §§ 20.302, 20.303, deleted § 20.304,[1] and Part 61 of this chapter.

(c) * * *

(3) Records of disposal of licensed materials made pursuant to §§ 20.302, 20.303, deleted § 20.304 [1]; and Part 61 of this chapter are to be maintained until the Commission authorizes their disposition.

* * * * *

16. Section 20.408 is amended by adding a new paragraph (a)(5) to read as follows:

§ 20.408 Reports of personnel monitoring on termination of employment or work.

(a) * * *

(5) Receive radioactive waste from other persons for disposal under part 61 of this chapter.

* * * * *

PART 21—REPORTING OF DEFECTS AND NONCOMPLIANCE

§ 21.2 [Amended]

17. Section 21.2 is amended by inserting "61"; after "40, 60," in the third line, and after "50, 60" in the final line.

§ 21.3 [Amended]

18. In § 21.3, paragraphs (a)(3), (a)(a-1)(1), (a)(a-1)(2), and (k) are amended by adding "61," after "50, 60."

§ 21.21 [Amended]

19. Section 21.21 is amended by adding "61,'" after "50, 60," in paragraphs (b)(1)(i) and (b)(1)(ii).

PARTS 30—RULES OF GENERAL APPLICABILITY TO LICENSING OF BYPRODUCT MATERIAL

20. Section 30.11(c) is revised to read as follows:

§ 30.11 Specific exemptions.

* * * * *

(c) Except as specifically provided in Part 61 of this Chapter, any licensee is exempt from the requirements of this part to the exent that its activities are subject to the requirements of Parts 60 and 61 of this chapter.

21. In § 30.32, paragraph (f) is amended to read as follows:

§ 30.32 Application for specific licenses.

* * * * *

(f) An application for a license for the conduct of any activity which the Commission determines will significantly affect the quality of the environment shall be filed at least 9 months to commencement of construction of the plant or facility in which the activity will be conducted and shall be accompanied by any Environmental Report required pursuant to Part 51 of this chapter.

22. In § 30.33, paragraph (a)(5) is revised to read as follows:

§ 30.33 General requirements for issuance of specific licenses.

(a) * * *

(5) In the case of an application for a license for the conduct of any activity which the Commission determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to Part 51 of this chapter, has concluded, after weighing the environmental, economic technical, and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such conclusion shall be grounds for denial of a license to receive and possess byproduct material in such plant or facility. As used in this paragraph the term "commencement of construction" means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, necessary roads for site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the site or the protection of environmental values.

* * * * *

PART 40—LICENSING OF SOURCE MATERIAL

23. In § 40.14, paragraph (c) is revised to read as follows:

§ 40.14 Specific exemptions.

* * * * *

(c) Except as specifically provided in Part 61 of this chapter any licensee is exempt from the requirements of this part to the extent that its activities are subject to the requirements of Parts 60 and 61 of this chapter.

24. In § 40.31, paragraph (f) is revised to read as follows:

§ 40.31 Applications for specific licenses.

• • • • •

(f) An application for a license to possess and use source material for uranium milling, production of uranium hexafluoride, or for the conduct of any other activity which the Commission determines will significantly affect the quality of the environment shall be filed at least 9 months prior to commencement of construction of the plant or facility in which the activity will be conducted and shall be accompanied by any Environmental Report required pursuant to Part 51 of this chapter.

• • • • •

25. In § 40.32, paragraph (e) is revised to read as follows:

§ 40.32 General requirements for issuance of specific licenses.

• • • • •

(e) In the case of an application for a license to possess and use source and byproduct material for uranium milling, production of uranium hexafluoride, or for the conduct of any other activity which the Commission determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to Part 51 of this chapter, has concluded, after weighing the environmental, economic, technical and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such a conclusion shall be grounds for denial of a license to possess and use source and byproduct material in such plant or facility. As used in this paragraph the term "commencement of construction" means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, necessary roads for site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the site or the protection of environmental values.

• • • • •

PART 51—LICENSING AND REGULATORY POLICY AND PROCEDURES FOR ENVIRONMENTAL PROTECTION

26. In § 51.5, paragraphs (a)(6) and (b)(4)(iii) are revised, paragraph (b)(6) is amended by inserting "61" following "50, 60,", and (d)(3) is amended by inserting "61" following "50, 60." The revised paragraphs read as follows:

§ 51.5 Actions requiring preparation of environmental impact statements, negative declarations, environmental impact appraisals; actions excluded.

(a) • • •

(6) Issuance of a license authorizing receipt and disposal of radioactive waste from other persons under Part 61 of this chapter;

• • • • •

(b) • • •

(4) • • •

(iii) Authorizing receipt and disposal of radioactive waste from other persons under Part 61 of this chapter.

• • • • •

§ 51.40 [Amended]

27. In § 51.40, paragraph (c) is amended by inserting "61" after "30, 40."

PART 70—DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

28. In § 70.14, paragraph (c) is amended to read as follows:

§ 70.14 Specific exemptions.

• • • • •

(c) Except as specifically provided in Part 61 of this chapter, any licensee is exempt from the requirements of the regulations in this part to the extent that its activities are subject to the requirements of Parts 60 and 61 of this chapter.

29. In § 70.21 paragraph (f) is revised to read as follows:

§ 70.21 Filing.

• • • • •

(f) An application for a license to possess and use special nuclear material for processing and fuel fabrication, scrap recovery or conversion of uranium hexafluoride, or for the conduct of any other activity which the Commission determines will significantly affect the quality of the environment shall be filed at least 9 months prior to commencement of constrution of the plant or facility in which the activity will be conducted, and shall be accompanied by an Environmental Report required under Part 51 • • • of this chapter.

• • • • •

30. In § 70.23 paragraph (a)(7) is revised to read as follows:

§ 70.23 Requirements for the approval of applications.

(a) • • •

(7) Where the proposed activity is processing and fuel fabrication, scrap recovery, conversion of uranium hexafluoride, or any other activity which the Commission determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to Part 51 of this chapter, has concluded, after weighing the environmental, economic, technical, and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such conclusions shall be grounds for denial to possess and use special nuclear material in such plant or facility. As used in this paragraph the term "commencement of construction" means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, necessary roads for site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the site or the protection of environmental values.

• • • • •

PART 73—PHYSICAL PROTECTION OF PLANTS AND MATERIALS

31. In § 73.1, paragraph (b)(1)(iii) is revised to read as follows:

§ 73.1 Purpose and scope.

• • • • •

(b) • • •

(1) • • •

(iii) the physical protection of special nuclear material by any person who, pursuant to the regulations in parts 61 and 70 of this chapter, possesses or uses at any site or contiguous sites subject to the control by the licensee, formula quantities of strategic special nuclear material or special nuclear material of moderate strategic significance or special nuclear material of low strategic significance.

• • • • •

PART 170—FEES FOR FACILITIES AND MATERIALS LICENSES AND OTHER REGULATORY SERVICES UNDER THE ATOMIC ENERGY ACT OF 1954, AS AMENDED*

32. Section 170.2 is revised to read as follows:

§ 170.2 Scope.

Except for persons who apply for or hold the permits, licenses, or approvals exempted in § 170.11, the regulations in this part apply to a person who is an applicant for, or holder of, a specific byproduct material license issued pursuant to Parts 30 and 32–35 of this chapter, a specific source material license issued pursuant to Part 40 of this chapter, a specific materials license issued under Part 61 of this chapter, a specific special nuclear material license issued pursuant to Part 70 of this chapter, a specific approval of spent fuel casks and shipping containers issued pursuant to Part 71 of this chapter, a specific request for approval of sealed sources and devices containing byproduct material, source material, or special nuclear material, or a production or utilization facility construction permit and operating license issued pursuant to Part 50 of this chapter, to routine safety and safeguards inspections of a licensed person, to a person who applies for approval of a reference standardized design of a nuclear steam supply system or balance of plant, for review of a facility site prior to the submission of an application for a construction permit, for review of a standardized spent fuel facility design, and for a special project review, which the Commission completes or makes whether or not in conjunction with a license application on file or which may be filed.

Note.—Amendments to all parts are issued pursuant to citations of authority presently codified or, in the case of 10 CFR Part 61, as set out after the list of sections in the new Part 61.

Dated at Washington, D.C., this 21st day of July 1981.

For the U.S. Nuclear Regulatory Commission.

Samuel J. Chilk,
Secretary of the Commission.

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