

PART X

Licensing Requirements for Interim Storage of Radioactive Waste

RHA 10.1 Purpose and Scope.

10.1.1 The regulations in this part establishes the procedures, criteria, standards, terms, and conditions upon which the Department will require a license or an amendment to an existing license for the establishment and operation of facilities for the interim storage of low-level radioactive waste generated within the state which were or will be routinely transferred for permanent emplacement in a licensed low-level radioactive waste disposal facility. A license will not be issued for storage of waste under this part unless all efforts have been exhausted in determining all other waste management options. The requirements of this part are in addition to, and not in substitution for, other applicable requirements of these regulations or other regulations.

10.1.2 This Part establishes technical requirements, procedural requirements, institutional requirements and performance objectives applicable to interim storage of radioactive waste.

10.1.3 Radioactive Material held for decay in storage under RHA 4.34 of this regulation is exempted from the requirements in this Part.

10.1.4 The regulations in this part do not apply to licensees of the Department or the U.S. Nuclear Regulatory Commission who will store less than seventy-five (75) cubic feet of low-level radioactive waste with a total activity of ten (10) curies or less and where radiation levels on any single package do not exceed five (5) millirem (.05 mSv) per hour at thirty (30) centimeters. Unless exempted under 10.1.3, any facility which stores waste which will readily decompose and produce gases or free liquids or will degrade the integrity of the storage container is subject to the requirements in this part. The Department may on a case-by-case basis grant exemptions or exceptions from the requirements of this part as it determines are authorized by law and will not result in undue hazard to public health and safety or the environment. These licensees will be subject to existing regulations for the possession and control of these radioactive materials under the terms and conditions of their specific license. Any facility constructed specifically for the storage of low-level radioactive waste must comply with the requirements in this part unless exempted by the Department.

10.1.5 Facilities licensed by the U.S. Nuclear Regulatory Commission under the authority in 10 CFR 150.15 are exempt from this part unless otherwise authorized by the U.S. Nuclear Regulatory Commission or by state or federal statute.

RHA 10.2 Definitions. As used in this part:

10.2.1 "Decontamination and Decommission Plan" means a detailed plan which describes the actions to remove all radioactive material from a facility, survey the facility to confirm the absence of radioactive material, and release the facility for unrestricted use.

10.2.2 "Disposal facility" means a facility licensed by the U.S. Nuclear Regulatory Commission or an agreement state for disposal of low-level radioactive waste.

10.2.3 "Interim storage" means storage of waste temporarily when other waste management options are not available.

10.2.4 "Mixed waste" means waste that contains a hazardous waste component regulated under subtitle C of the Resource Conservation and Recovery Act (RCRA) and a radioactive waste component consisting of source, special nuclear or byproduct material regulated by the Atomic Energy Act (AEA).

10.2.5 "Repackaging" means placement of an existing package and its contents into a new package for the purpose of meeting disposal requirements or to prevent the release of radioactive material from the package during storage. Repackaging does not include the removal of waste from a package.

10.2.6 "Storage facility" means any building or structure or part of a building or structure which meets the requirements of this part and is used for storage of low level radioactive waste.

RHA 10.3 License Required.

10.3.1 No person may receive, possess, and store waste at a waste storage facility unless authorized by a license issued by the Department pursuant to this part, and Part II of these regulations. A certification from the generators must be submitted indicating that a program has been implemented to reduce the volume and activity of their waste using the best available technology to the degree determined to be economically practicable.

10.3.2 Each person shall file an application with the Department pursuant to 2.5 of these regulations and obtain a license as provided in this part before placing waste in a storage facility, unless otherwise authorized by the Department. Failure to comply with the requirements in this part may be grounds for denial of a license.

RHA 10.4 Content of Application.

In addition to the requirements set forth in 2.6 of these regulations, an application to receive, possess, and store wastes shall consist of general information, specific technical information, and financial information as set forth in 10.5 through 10.9.

RHA 10.5 General Information.

The general information shall include each of the following:

10.5.1 Identity of the applicant including:

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

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

10.5.1.3 If the applicant is a corporation or an unincorporated association (1) state where it is incorporated or organized and the principal location where it does business and (2) the names and addresses of its directors and principal officers; and

10.5.1.4 If the applicant is acting as an agent or representative of another person in filing the application, all information required under 10.5.1 must be supplied with respect to the other person.

10.5.2 Qualifications of the applicant:

10.5.2.1 The organizational structure of the applicant, both off site and on site, including a description of lines of authority and assignments of responsibilities, whether in the form of administrative directives, contract provisions, or otherwise;

10.5.2.2 The technical qualifications, including training and experience, of the applicant and members of the applicant's staff to engage in the proposed activities. Minimum training and experience requirements for personnel filling key positions described in 10.5.2.1 must be provided;

10.5.2.3 A description of the applicant's personnel training program; and

10.5.2.4 The plan to maintain an adequate complement of trained personnel to carry out waste receipt, handling, and storage operations in a safe manner.

10.5.3 A description of:

10.5.3.1 The location of the proposed storage facility;

10.5.3.2 The general character of the proposed activities;

10.5.3.3 The types, physical forms, non radiological properties, if any (hazardous, pathogenic, corrosive, flammable, explosive) of the waste, quantities of waste to be received, possessed, and stored, and waste container description;

10.5.3.4 The waste repackaging capability in consideration of possible degradation of waste containers during storage and changing disposal requirements;

10.5.3.5 Specification of any increases in possession limits; and

10.5.3.6 The proposed facilities and equipment.

10.5.4 Proposed schedules for construction, receipt of waste, and first placement of waste at the proposed storage facility.

10.5.5 Assurance that the waste packages will be transportable at the end of the storage period.

10.5.6 Proposed plans for ultimate disposal of the stored waste; schedule to dispose of the inventory; estimated date to begin shipment of stored waste for disposal; and provisions for transportation and disposal at a licensed disposal facility.

RHA 10.6 Specific Technical Information.

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

10.6.1 A description of the characteristics of the selected site in relation to the construction of a waste storage facility. The description shall include technical bases and supporting calculations to justify the selection of property boundary and to determine that the operation of the facility will have a minimum impact of the surrounding areas and estimates of radiation doses which could occur at the property boundary in the event of accident conditions.

10.6.2 A description of the design features of the storage facility in relation to containing and maintaining the waste; measures to control access and security; applicability of the wastes containers for storage and disposal; waste container repackaging capability; occupational exposures; and storage site monitoring.

10.6.3 A description of the principal design criteria and their relationship to the performance objectives.

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

10.6.5 A description of codes and standards which the applicant has applied to the design and which will apply to construction of the storage facility.

10.6.6 A description of the building construction which shall include the pad, roof, weather protection, insulation and humidity control.

10.6.7 A description of the operation of the storage facility which shall include as a minimum the methods of waste storage; program and procedures for waste container segregation; consideration of the effect of radiation field from neighboring packages to container degradation; hazards posed to container integrity; design features of the ventilation systems, fire protection and suppression systems; accessibility for routine and periodic inspection and physical inventory; emergency equipment access; the ability to monitor and detect container failure; collection system capability in case of leakage from damaged containers; and program and equipment including remote handling equipment for handling, repairing or repackaging leaking or damaged containers. The description shall also include a description of the methods to be employed in the handling and storage of wastes containing non radiological substances that might affect meeting the performance objectives of this part.

10.6.8 A description of the decontamination and decommissioning (D & D) plan of the storage facility.

10.6.9 A description of the kind, amount, classification and specification of the radioactive waste proposed to be received, possessed, and stored at the storage facility. The waste classification and packaging must meet the requirements set forth in Part III of these regulations.

10.6.10 A description of the quality control program for the determination of storage site characteristics and for quality control during the design, construction, operation, and D & D of the storage facility and the receipt, handling, and storage of waste. Audits and managerial controls must be included.

10.6.11 A description of the radiation safety program for control and monitoring of radioactive effluents to ensure compliance with the performance objective in 10.14 and occupational radiation exposure to ensure compliance with the requirements of Part III of these regulations and to control contamination of personnel, vehicles, equipment, and the storage facility. A description of the projected exposure rates, needs and types of shielding, and changes in personnel monitoring which will be required as a result of waste storage. Both routine operations and accidents shall be addressed. The program description must include procedures, instrumentation, facilities, and equipment.

10.6.12 A description of an emergency plan for handling unplanned events must be available to institute protective actions.

10.6.12.1 The plan must incorporate waste management provisions that are sufficient to comply with the requirements of this regulation.

10.6.12.2 The plan must describe arrangements agreed to by local police department, fire department, hospitals, contractors and State and local emergency response teams to coordinate emergency services.

10.6.12.3 The plan must include a list of all emergency equipment at the facility. The list must be up to date and include the location and physical description of each item on the list.

10.6.13 A description of the environmental monitoring program to provide data to evaluate potential health and environmental impacts and the plan for taking corrective measures.

10.6.14 A description of the administrative procedures that the applicant will apply to control activities at and any wastes generated from the operation of the storage facility.

RHA 10.7 Technical Analysis.

The specific technical information shall include the following analyses needed to demonstrate that the performance objective of this part will be met:

10.7.1 An analysis demonstrating that releases of radioactivity to an unrestricted area will not exceed the limits specified in Part III of these regulations.

10.7.2 Analyses of the protection of individuals during operations shall include assessments of expected exposures due to routine operations and likely accidents during handling, and storage of waste. The analyses shall provide reasonable assurance that exposure will be controlled to meet the requirements of Part III of these regulations.

RHA 10.8 Financial Information.

The financial information shall 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 to meet other financial assurance requirements of this part.

RHA 10.9 Requirements for Issuance of a License.

A license for the receipt, possession, and storage of waste containing or contaminated with radioactive material will be issued by the Department upon finding that:

10.9.1 The issuance of the license will not constitute an unreasonable risk to the health and safety of the public;

10.9.2 The applicant is qualified by reason of training and experience to carry out operations at a storage facility requested in a manner that protects health and minimizes danger to life or property;

10.9.3 The applicant's proposed location and design of the storage facility, facility operations, including equipment, facilities, and procedures, and D & D plans 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 10.14;

10.9.4 The applicant's proposed storage facility operations, including equipment, facilities, and procedures, are adequate to protect the public health and safety in that they will provide reasonable assurance that the standards for radiation protection set out in Part III of these regulations will be met;

10.9.5 The applicant's demonstration provides reasonable assurance that the applicable technical requirements of this part will be met;

10.9.6 The financial or surety arrangements meet the requirements in 10.15.

RHA 10.10 Conditions of Licenses.

10.10.1 A license issued under this part, or any right thereunder, may not be transferred, assigned, or in any manner disposed of either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Department finds, after securing full information, that the transfer is in accordance with the provisions of the Act and gives its consent in writing in the form of a license amendment.

10.10.2 The licensee shall submit written statements under oath upon request of the Department, at any time before termination of the license, to enable the Department to determine whether the license should be modified, suspended, or revoked.

10.10.3 The license will be terminated only on disposition of stored waste and the full implementation of the D & D plan as approved and determined by the Department.

10.10.4 The licensee shall be subject to the provisions of the Act now or hereafter in effect, and to all rules, regulations, and orders of the Department. 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 Act.

10.10.5 Each person licensed by the Department pursuant to the regulations in this part shall confine possession to the locations and purposes authorized in the license.

10.10.6 The licensee shall not store waste until the Department has inspected the storage facility and has found it to be in conformance with the description, design, and construction described in the application for a license.

10.10.7 The Department 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 storage of waste as it deems appropriate or necessary in order to:

10.10.7.1 Protect health or to minimize danger to life or property;

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

RHA 10.11 Application for Renewal or Termination.

10.11.1 An application for renewal or an application for termination under 10.12 must be filed at least 90 days prior to license expiration.

10.11.2 Applications for renewal of a license must be filed in accordance with 10.4 through 10.8. Applications for termination must be filed in accordance with 10.12. Information contained in previous applications, statements, or reports filed with the Department under the license may be incorporated by reference if the references are clear and specific.

10.11.3 In any case in which a licensee has filed an application in proper form for renewal of a license, the license does not expire until the Department has taken final action on the application for renewal.

10.11.4 In determining whether a license will be renewed, the Department will apply the criteria set forth in 10.9.

RHA 10.12 Contents of Application for Termination of the License.

10.12.1 Prior to termination of the license, or as otherwise directed by the Department, the applicant shall submit an application for termination. This application shall include evidence that all stored waste has been transferred to a disposal facility or storage facility licensed to accept the waste and specific details of the D & D plan included as part of the license application submitted under 10.6.7 that includes:

10.12.1.1 Decontamination and/or dismantlement of facilities; and

10.12.1.2 Any significant new information regarding the environmental impact of the decommissioning activities.

10.12.2 A license shall be terminated only when the Department finds:

10.12.2.1 The requirements in 10.12.1 have been met; and

10.12.2.2 That any additional requirements resulting from new information developed during the D & D of the facility have been met.

10.12.3 Release of the facility for unrestricted use after D & D activities shall be determined by the Department on a case to case basis.

RHA 10.13 Protection of Individuals During Operations.

Operations at the waste storage facility shall be conducted in compliance with the standards for radiation protection set out in Part III of these regulations. Every reasonable effort should be made to maintain radiation exposures as low as is reasonably achievable.

RHA 10.14 Environmental Monitoring.

10.14.1 At the time a license application is submitted, the applicant shall have conducted a pre-operational monitoring program to provide basic environmental data on the storage site characteristics.

10.14.2 During the storage facility site construction and operation, the licensee shall maintain an environmental 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. The monitoring system must be capable of providing early warning of releases of radioactive material from the storage site before they leave the site boundary.

10.14.3 The licensee shall have plans for taking corrective measures if the environmental monitoring program detects contamination which exceeds those allowed under Part III of these regulations.

RHA 10.15 Applicant Qualifications and Assurances.

10.15.1 Each applicant shall provide the necessary funds or has reasonable assurance in providing the necessary funds, or by a combination of the two, to:

10.15.1.1 Cover the estimated costs of conducting all licensed activities over the planned operating life of the storage facility, including costs of construction;

10.15.1.2 Cover the cost of contingencies arising from the operation of the storage facility;

10.15.1.3 Cover the cost of handling, transport and ultimate disposal of the stored waste;

10.15.1.4 Cover the cost of handling, transport and disposal of waste stored for other generators in the event of inability of the other generators to dispose of their wastes. Payment of fees for using the storage facility must be made available to a fund to defray the expenses incurred in disposing of their wastes; and

10.15.1.5 Cover the cost of D & D of the storage facility. An arrangement for payment into a D & D trust fund must be established with the Department.

10.15.2 The Department will accept financial sureties that have been consolidated with earmarked financial or surety arrangements established to meet requirements of federal or other state agencies (and/or local government bodies).

10.15.3 The licensee's financial or surety arrangement shall be submitted annually for review by the Department.

10.15.4 The amount of the licensee's financial or surety arrangement shall change in accordance with changes in predicted costs. The financial or surety arrangement shall be sufficient at all times to cover the costs specified in 10.15.1.

10.15.5 Financial or surety arrangements generally acceptable to the Department include surety bonds, cash deposits, certificates of deposit, deposits of government securities, escrow accounts, irrevocable letters or lines of credit, trust funds, and combination of the above or such other types of arrangements as may be approved by the Department. Self insurance, or any arrangement which essentially constitutes self insurance, will not satisfy the surety requirement for private sector applicants.

10.15.6 The licensee's financial or surety arrangement shall remain in effect until the Department finds that compliance of requirements of license termination has been met.

RHA 10.16 Institutional Requirements.

Land ownership. Storage of waste received from other persons shall be permitted only on land owned in fee by the federal or a state government.

RHA 10.17 Maintenance of Records and Reports.

10.17.1 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 Department.

10.17.2 Records which are required by these regulations or by license conditions shall be maintained for a period specified by appropriate regulations or by license conditions.

10.17.3 Records which shall be maintained pursuant to this part may be the original or a reproduced copy or microfilm if this reproduced copy or microfilm is capable of producing a copy that is clear and legible at the end of the required retention period. Other record maintenance systems may be used if approved by the Department.

10.17.4 Records of the location and the quantity of wastes contained in the storage facility and of the actual physical inventory must be maintained by the licensee.

10.17.5 Following receipt and acceptance of a shipment of waste, the licensee shall record the date of storage of the waste, the location in the storage facility, the condition of the waste packages as received, any discrepancies between materials listed on the manifest and those received, and any evidence of leaking or damaged packages or radiation or contamination levels in excess of limits specified in U.S. Department of Transportation and Department regulations. Any leaking or damaged packages must be repackaged prior to placement in the storage facility. The licensee shall briefly describe any repackaging operations of any of the waste packages included in the shipment, plus any other information required by the Department as a license condition.

10.17.6 Each licensee authorized to store waste received from other persons shall file a copy of its financial report or a certified financial statement annually with the Department in order to update the information base for determining financial qualifications.

10.17.7 Each licensee authorized to store waste, pursuant to this part, shall submit annual reports to the Department. Reports shall be submitted by the end of the first calendar quarter of each year for the preceding year.

10.17.7.1 The reports shall include:

10.17.7.1.1 Any releases of contaminants to unrestricted areas in liquid and in airborne effluents during the preceding year,

10.17.7.1.2 The results of the environmental monitoring program,

10.17.7.1.3 A summary of licensee's storage unit survey and maintenance activities.

10.17.7.1.4 A summary, by waste class, of activities and quantities of radionuclides stored,

10.17.7.1.5 Any instances in which observed site characteristics were significantly different from those described in the application for a license,

10.17.7.1.6 The results of physical inventories, and

10.17.7.1.7 Any other information the Department may require.

10.17.7.2 If the quantities of waste stored during the reporting period, monitoring results, or maintenance performed are significantly different from those predicted, the report must cover this specifically and must identify actions which will be taken to reduce both the volume and activity of additional waste placed in the facility.

RHA 10.18 Tests on Storage Facilities.

Each licensee shall perform, or permit the Department to perform, any tests the Department deems appropriate or necessary for the administration of the regulations in this part, including, but not limited to, tests of:

10.18.1 Wastes;

10.18.2 Facilities used for the receipt, storage, treatment, or handling of wastes;

10.18.3 Radiation detection and monitoring instruments; or

10.18.4 Other equipment and devices used in connection with the receipt, possession, handling, or storage.

RHA 10.19 Department Inspections of Storage Facilities.

10.19.1 Each licensee shall afford to the Department at all reasonable times opportunity to inspect stored waste, and the premises, equipment, operations, and facilities in which wastes are received, possessed, handled, or stored.

10.19.2 Each licensee shall make available to the Department for inspection, upon reasonable notice, records kept by it pursuant to these regulations. Authorized representatives of the Department may copy and take away copies of, for the Department's use, any record required to be kept pursuant to these regulations.