

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 3 RADIATION PROTECTION
PART 13 LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE WASTE

20.3.13.1 ISSUING AGENCY: Environmental Improvement Board.
[5-3-95; 20.3.13.1 NMAC - Rn, 20 NMAC 3.1.1.100, 04/15/2004]

20.3.13.2 SCOPE:

A. The regulations in this part (20.3.13 NMAC) establish procedures, criteria, and terms and conditions upon which the department issues licenses for the land disposal of wastes received from other persons. The requirements of this part (20.3.13 NMAC) are in addition to, and not in substitution for, other applicable requirements of these regulations.

B. The regulations in this part (20.3.13 NMAC) do not apply to disposal of byproduct material as defined in definition (2) of “byproduct material”, in Paragraph (2) of Subsection F of 20.3.1.7 NMAC in quantities greater than 10,000 kilograms containing more than 5 millicuries (18.5 megabecquerels) of radium-226, or disposal of waste as provided in 20.3.4 NMAC.

C. This part (20.3.13 NMAC) establishes procedural requirements and performance objectives applicable to any method of land disposal. It establishes specific technical requirements for near-surface disposal of radioactive waste which involves disposal in the uppermost portion of the earth.
[5-3-95; 20.3.13.2 NMAC - Rn, 20 NMAC 3.1.13.1300, 04/15/2004; A, 04/30/2009]

20.3.13.3 STATUTORY AUTHORITY: Sections 74-1-9, 74-3-5, and 74-3-9 NMSA 1978.
[5-3-95; 20.3.13.3 NMAC - Rn, 20 NMAC 3.1.1.102, 04/15/2004]

20.3.13.4 DURATION: Permanent.
[5-3-95; 20.3.13.4 NMAC - Rn, 20 NMAC 3.1.1.103, 04/15/2004]

20.3.13.5 EFFECTIVE DATE: May 3, 1995, unless a later date is cited at the end of a section.
[5-3-95, 8-2-95, A, 7-30-99; 20.3.1.5 NMAC - Rn, 20 NMAC 3.1.1.104, 04/15/2004]

20.3.13.6 OBJECTIVE: The regulations in this part (20.3.13 NMAC) establish procedures, criteria, and terms and conditions upon which the department issues licenses for the land disposal of wastes. [Refer to the purpose and scope promulgated by the board as specified in 20.3.13.2 NMAC.]
[5-3-95; 20.3.13.6 NMAC - Rn, 20 NMAC 3.1.13.1300.A, 04/15/2004]

20.3.13.7 DEFINITIONS: As used in this part (20.3.13 NMAC), the following definitions apply.

A. “Active maintenance” means any significant activity needed during the period of institutional control to maintain a reasonable assurance that the performance objectives in 20.3.13.1307 NMAC and 20.3.13.1308 NMAC 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, revegetation, minor additions to soil cover, minor repair of disposal unit covers and general disposal site upkeep, such as mowing grass.

B. “Buffer zone” means a portion of the disposal site that is controlled by the licensee, and that lies under the disposal units and between the disposal units and the boundary of the site.

C. “Chelating agent” means amine polycarboxylic acids, hydroxy-carboxylic acids, gluconic acid and polycarboxylic acids.

D. “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.

E. “Custodial agency” means an agency of the government designated to act on behalf of the government owner of the disposal site.

F. “Disposal” means the isolation of wastes from the biosphere inhabited by man and his food chains by emplacement in a land disposal facility.

G. “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.

H. “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.

I. “Engineered barrier” means a man-made structure or device that is intended to improve the land disposal facility’s ability to meet the performance objective in this part (20.3.13 NMAC).

J. “Explosive material” means any chemical compound, mixture or device which produces a substantial instantaneous release of gas and heat spontaneously, or by contact with sparks or flame.

K. “Hazardous waste” means those wastes designated as hazardous by U.S. environmental protection agency regulations in 40 CFR, Part 261.

L. “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 ground water.

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

N. “Intruder barrier” means a sufficient depth of cover over the waste that inhibits contact with waste, and helps to ensure that radiation exposures to an inadvertent intruder will meet the performance objectives set forth in this part (20.3.13 NMAC), or engineered structures that provide equivalent protection to the inadvertent intruder.

O. “Land disposal facility” means the land, buildings and equipment which is intended to be used for the disposal of wastes into the subsurface of the land.

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

Q. “Near-surface disposal facility” means a land disposal facility in which waste is disposed of within approximately the upper 30 meters of the earth’s surface.

R. “Pyrophoric liquid” means any liquid that ignites spontaneously in dry or moist air at or below 130 degrees F (54.4 degrees C). A pyrophoric solid is any solid material, other than one classed as an explosive, which under normal conditions is liable to cause fires through friction, retained heat from manufacturing or processing, or which can be ignited readily, and when ignited, burns so vigorously and persistently as to create a serious transportation, handling or disposal hazard. Included in this definition are spontaneously combustible and water-reactive materials.

S. “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 will remain stable and will not need ongoing active maintenance.

T. “Stability” means structural stability.

U. “Surveillance” means monitoring and 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.

[5-3-95; 20.3.13.7 NMAC - Rn, 20 NMAC 3.1.13.1301 & A, 04/15/2004; A, 04/30/2009]

20.3.13.8 through 20.3.13.1301 [RESERVED]

20.3.13.1302 LICENSE REQUIRED:

A. No person may receive, possess, and dispose of waste received from other persons at a land disposal facility, unless authorized by a license issued by the department pursuant to this part (20.3.13 NMAC), and 20.3.3 NMAC.

B. Each person shall file an application with the department pursuant to 20.3.3.307 NMAC and obtain a license as provided in this part (20.3.13 NMAC) before commencement of construction of a land disposal facility. Failure to comply with this requirement may be grounds for denial of a license.

[5-3-95; 20.3.13.1302 NMAC - Rn, 20 NMAC 3.1.13.1302, 04/15/2004]

20.3.13.1303 CONTENT OF APPLICATION: In addition to the requirements set forth in 20.3.3.308 NMAC, an application to receive from others, possess and dispose of wastes shall consist of general information, specific technical information, institutional information, and financial information as set forth in 20.3.13.1304 NMAC through 20.3.13.1308 NMAC.

[5-3-95; 20.3.13.1303 NMAC - Rn, 20 NMAC 3.1.13.1303, 04/15/2004]

20.3.13.1304 GENERAL INFORMATION: The general information shall 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, the state where it is incorporated or organized and the principal location where it does business, and 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 Subsection A of 20.3.13.1304 NMAC must be supplied with respect to the other person.
- B.** Qualifications of the applicant including:
- (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;
 - (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 Paragraph (1) of Subsection B of 20.3.13.1304 NMAC, must be provided;
 - (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 waste to be received, possessed and disposed of;
 - (4) plans for use of the land disposal facility for purposes other than disposal of 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.

[5-3-95; 20.3.13.1304 NMAC - Rn, 20 NMAC 3.1.13.1304, 04/15/2004]

20.3.13.1305 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 (20.3.13 NMAC) will be met:

- A.** a description of the natural and demographic disposal site characteristics as determined by disposal site selection and characterization activities; the description shall include geologic, geochemical, geotechnical, hydrologic, ecologic, archaeologic, 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 shall 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 to the extent practicable of long-term disposal site maintenance; inadvertent intrusion; occupational exposures; disposal site monitoring; and adequacy of the size of the buffer zone for monitoring and potential mitigative measures;
- 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 shall include, as a minimum, the methods of construction of disposal units, waste employment, the procedures for and areas of waste segregation, types of intruder barriers, on-site traffic and drainage systems, survey control program, methods and areas of waste storage, and methods to control surface water and ground water access to the wastes; the description shall also include a description of the methods to be employed in the handling and disposal of wastes

containing chelating agents or other non-radiological substances that might affect meeting the performance objectives of this part (20.3.13 NMAC);

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 known natural resources at the disposal site, whose exploitation could result in inadvertent intrusion into the 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, operation and closure 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 of radioactive effluents to ensure compliance with the performance objective in 20.3.13.1317 NMAC and occupational radiation exposure to ensure compliance with the requirements of 20.3.4 NMAC, and to control contamination of personnel, vehicles, equipment, buildings and the disposal site; both routine operations and accidents shall 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; and

N. a description of the facility electronic record keeping system as required in 20.3.13.1334 NMAC. [5-3-95, 7-30-99; 20.3.13.1305 NMAC - Rn, 20 NMAC 3.1.13.1305, 04/15/2004]

20.3.13.1306 TECHNICAL ANALYSES: The specific technical information shall also include the following analyses needed to demonstrate that the performance objectives of this part (20.3.13 NMAC) will be met:

A. pathways analyzed in demonstrating protection of the general population from releases of radioactivity shall include air, soil, ground water, surface water, plant uptake and exhumation by burrowing animals; the analysis shall clearly identify and differentiate between the roles performed by the natural disposal site characteristics and design features in isolating and segregating the wastes; the analysis shall clearly demonstrate that there is reasonable assurance that the exposure to humans from the release of radioactivity will not exceed the limits set forth in 20.3.13.1317 NMAC;

B. analysis of the protection of individuals from inadvertent intrusion shall include demonstration that there is reasonable assurance 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 shall include assessments of expected exposures due to routine operations and likely accidents during handling, storage and disposal of waste; the analysis shall provide reasonable assurance that exposures will be controlled to meet the requirements of 20.3.4 NMAC; and

D. analyses of the long-term stability of the disposal site and the need for ongoing active maintenance after site closure shall 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 shall provide reasonable assurance that there will not be a need for ongoing active maintenance of the disposal site following closure.

[5-3-95; 20.3.13.1306 NMAC - Rn, 20 NMAC 3.1.13.1306, 04/15/2004]

20.3.13.1307 INSTITUTIONAL INFORMATION: The institutional information submitted by the applicant shall include:

A. a certification by the federal or state agency which owns the disposal site that the federal or state agency is prepared to accept transfer of the license when the provisions of 20.3.13.1304 NMAC are met, and will assume responsibility for institutional control after site closure and post closure observation and maintenance; and

B. where the proposed disposal site is on land not owned by the federal or a state government, the applicant shall submit evidence that arrangements have been made for assumption of ownership in fee by a federal or a state agency before the department issues a license.

[5-3-95; 20.3.13.1307 NMAC - Rn, 20 NMAC 3.1.13.1307, 04/15/2004]

20.3.13.1308 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 meet other financial assurance requirements of 20.3.3 NMAC.
[5-3-95; 20.3.13.1308 NMAC - Rn, 20 NMAC 3.1.13.1308, 04/15/2004]

20.3.13.1309 REQUIREMENTS FOR ISSUANCE OF A LICENSE: A license for the receipt, possession, and disposal of waste containing or contaminated with radioactive material will be issued by the department upon finding that:

- A.** the issuance of the license will not constitute an unreasonable risk to the health and safety of the public;
- B.** the applicant is qualified, by reason of training and experience, to carry out the disposal operations requested in a manner that protects and minimizes danger to life or property;
- C.** the applicant's proposed disposal site, disposal design, land disposal facility operations, including equipment, facilities and procedures, disposal site closure and post-closure institutional control, 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 20.3.13.1317 NMAC;
- D.** the applicant's proposed disposal site, disposal site design, land disposal facility operations, including equipment, facilities and procedures, disposal site closure and post-closure institutional control, are adequate to protect the public health and safety in that they will provide reasonable assurance that individual inadvertent intruders are protected in accordance with the performance objective in 20.3.13.1318 NMAC;
- E.** 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 will provide reasonable assurance that the standards for radiation protection set out in 20.3.4 NMAC will be met;
- F.** the applicant's proposed disposal site, disposal site design, land disposal facility operations, disposal site closure and post-closure institutional control are adequate to protect the public health and safety in that they will provide reasonable assurance that long-term stability of the disposed waste and the disposal site will be achieved, and will eliminate to the extent practicable the need for ongoing active maintenance of the disposal site following closure;
- G.** the applicant's demonstration provides reasonable assurance that the applicable technical requirements of this part (20.3.13 NMAC) will be met;
- H.** the applicant's proposal for institutional control provides reasonable assurance that such control will be provided for the length of time found necessary to ensure the findings in Subsections C through F of 20.3.13.1309 NMAC, and that the institutional control meets the requirements of 20.3.13.1330 NMAC; and
- I.** the financial or surety arrangements meet the requirements of this part (20.3.13 NMAC) and 20.3.3 NMAC.

[5-3-95; 20.3.13.1309 NMAC - Rn, 20 NMAC 3.1.13.1309, 04/15/2004]

20.3.13.1310 CONDITIONS OF LICENSES:

- A.** A license issued under this part (20.3.13 NMAC), or any right there under, may 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, only if 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.
- B.** 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.
- C.** The license will be terminated only on the full implementation of the final closure plan as approved by the department, including post-closure observation and maintenance.
- D.** 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 board or 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.
- E.** Each person licensed by the department pursuant to the regulations in this part (20.3.13 NMAC) shall confine possession and use of materials to the locations and purpose authorized in the license.
- F.** The licensee shall not dispose of waste until the department has inspected the land disposal facility and has found it to be in conformance with the description, design and construction in the application for a license.

G. 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 disposal of waste as it deems appropriate or necessary in order to:

- (1) protect health or to minimize danger to life or property; and
- (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 there under.

H. The authority to dispose of wastes expires on the date stated in the license. 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 shall not relieve the licensee of responsibility for implementing site closure, post-closure observation and transfer of the license to the site owner.

I. Each licensee shall notify the department in writing immediately following the filing of a voluntary or involuntary petition for bankruptcy under any Chapter of Title 11 (bankruptcy) of the United States Code by or against:

- (1) the licensee;
- (2) an entity (as that term is defined in 11 U.S.C. 101(14)) controlling the licensee or listing the license or licensee as property of the estate; or
- (3) an affiliate (as that term is defined in 11 U.S.C. 101(2)) of the licensee.

J. The notification specified in 20.3.13.1310 NMAC shall indicate the bankruptcy court in which the petition for bankruptcy was filed and the date of the filing of the petition.
[5-3-95; 20.3.13.1310 NMAC - Rn, 20 NMAC 3.1.13.1310, 04/15/2004]

20.3.13.1311 APPLICATION FOR RENEWAL OR CLOSURE:

A. An application for renewal or an application for closure under 20.3.13.1302 NMAC must be filed at least 90 days prior to license expiration.

B. Applications for renewal of a license must be filed in accordance with sections 20.3.13.1304 NMAC through 20.3.13.1308 NMAC. Applications for closure must be filed in accordance with 20.3.13.1312 NMAC. 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.

C. 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.

D. In determining whether a license will be renewed, the department will apply the criteria set forth in 20.3.13.1309 NMAC.

[5-3-95; 20.3.13.1311 NMAC - Rn, 20 NMAC 3.1.13.1311, 04/15/2004]

20.3.13.1312 CONTENTS OF APPLICATION FOR SITE CLOSURE AND STABILIZATION:

A. Prior to final closure of the disposal site, or as otherwise directed by the department, the applicant shall submit an application to amend the license for closure. This closure application shall include a final revision and specific details of the disposal site closure plan included as subpart of the license application submitted under Subsection G of 20.3.13.1305 NMAC that includes each of the following:

- (1) any additional geologic, hydrologic or other data pertinent to the long-term containment of emplaced 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:
 - (a) decontamination and/or dismantlement of surface facilities;
 - (b) backfilling of excavated areas; or
 - (c) stabilization of the disposal site for post-closure care; and
- (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 Subsection A of 20.3.13.1312 NMAC, the department shall issue an amendment authorizing closure if there is reasonable assurance that the long-term performance objectives of this part (20.3.13 NMAC) will be met.

[5-3-95; 20.3.13.1312 NMAC - Rn, 20 NMAC 3.1.13.1312, 04/15/2004]

20.3.13.1313 POST-CLOSURE OBSERVATION AND MAINTENANCE. 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 department in accordance with 20.3.13.1314 NMAC. Responsibility for the disposal site must be maintained by the licensee for 5 years. A shorter or longer time period for post-closure observation and maintenance may be established by the department and approved as part of the site closure plan, based on site-specific conditions.

[5-3-95; 20.3.13.1313 NMAC - Rn, 20 NMAC 3.1.13.1313, 04/15/2004]

20.3.13.1314 TRANSFER OF LICENSE: 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 department finds:

A. 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;

B. that reasonable assurance has been provided by the licensee that the performance objectives of this part (20.3.13 NMAC) are met;

C. that any funds and necessary records for care will be transferred to the disposal site owner;

D. that the post-closure monitoring program is operational for implementation by the disposal site owner; and

E. that the federal or state agency which will assume responsibility for institutional control of the disposal site is prepared to assume responsibility and ensure that the institutional requirements found necessary under Subsection H of 20.3.13.1309 NMAC will be met.

[5-3-95; 20.3.13.1314 NMAC - Rn, 20 NMAC 3.1.13.1314, 04/15/2004]

20.3.13.1315 TERMINATION OF LICENSE:

A. Following any period of institutional control needed to meet the requirements found necessary under 20.3.13.1309 NMAC, the licensee may apply for an amendment to terminate the license.

B. This application will be reviewed in accordance with the provisions of 20.3.3.307 NMAC.

C. A license shall be terminated only when the department finds:

(1) that the institutional control requirements found necessary under Subsection H of 20.3.13.1309 NMAC have been met;

(2) that any additional requirements resulting from new information developed during the institutional control period have been met; and

(3) that permanent monuments or markers warning against intrusion have been installed.

[5-3-95; 20.3.13.1315 NMAC - Rn, 20 NMAC 3.1.13.1315, 04/15/2004]

20.3.13.1316 GENERAL REQUIREMENTS. Land disposal facilities shall be sited, designed, operated, closed and controlled after closure so that reasonable assurance exists that exposure to individuals are within the requirements established in the performance objectives in sections 20.3.13.1317 NMAC through 20.3.13.1320 NMAC.

[5-3-95; 20.3.13.1316 NMAC - Rn, 20 NMAC 3.1.13.1316, 04/15/2004]

20.3.13.1317 PROTECTION OF THE GENERAL POPULATION FROM RELEASE OF RADIOACTIVITY. Concentrations of radioactive material, which may be released to the general environment in ground water, surface water, air, soil, plants or animals, shall not result in an annual dose exceeding an equivalent of 25 millirems (250 microsieverts) to the whole body, 75 millirems (750 microsieverts) to the thyroid and 25 millirems (250 microsieverts) to any other organ of any member of the public. Reasonable effort should be made to maintain releases of radioactivity in effluents to the general environment as low as reasonably achievable.

[5-3-95; 20.3.13.1317 NMAC - Rn, 20 NMAC 3.1.13.1317, 04/15/2004]

20.3.13.1318 PROTECTION OF INDIVIDUALS FROM INADVERTENT INTRUSION. Design, operation and closure of the land disposal facility shall ensure protection of any individual inadvertently intruding into the disposal site and occupying the site or contacting the waste at any time after active institutional controls over the disposal sites are removed.

[5-3-95; 20.3.13.1318 NMAC - Rn, 20 NMAC 3.1.13.1318, 04/15/2004]

20.3.13.1319 PROTECTION OF INDIVIDUALS DURING OPERATIONS. Operations at the land disposal facility shall be conducted in compliance with the standards for radiation protection set out in Part 4 (20.3.4) NMAC, except for releases of radioactivity in effluents from the land disposal facility, which shall be governed by 20.3.13.1317 NMAC. Every reasonable effort should be made to maintain radiation exposures as low as is reasonably achievable.

[5-3-95; 20.3.13.1319 NMAC - Rn, 20 NMAC 3.1.13.1319, 04/15/2004]

20.3.13.1320 STABILITY OF THE DISPOSAL SITE AFTER CLOSURE. The disposal facility shall be sited, designed, used, operated and closed to achieve long-term stability of the disposal site and to eliminate, to the extent practicable, the need for ongoing active maintenance of the disposal site following closure so that only surveillance, monitoring or minor custodial care are required.

[5-3-95; 20.3.13.1320 NMAC - Rn, 20 NMAC 3.1.13.1320, 04/15/2004]

20.3.13.1321 DISPOSAL SITE SUITABILITY REQUIREMENTS FOR LAND DISPOSAL: Disposal site suitability for near-surface disposal: The primary emphasis in disposal site suitability is given to isolation of wastes, and to disposal site features that ensure that the long-term performance objectives are met.

A. The disposal site shall be capable of being characterized, modeled, analyzed and monitored.

B. Within the region 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 this part (20.3.13 NMAC).

C. Areas having known natural resources which, if exploited, would result in failure to meet the performance objectives of this part (20.3.13 NMAC) shall be avoided.

D. The disposal site shall 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, as defined in Executive Order 11988, "floodplain management guidelines".

E. Upstream drainage areas shall be minimized to decrease the amount of runoff which could erode or inundate waste disposal units.

F. The disposal site shall provide sufficient depth to the water table such that ground water intrusion, perennial or otherwise, into the waste will not occur. The department will consider an exception to this requirement to allow disposal below the water table if it can be conclusively shown that disposal site characteristics will result in molecular diffusion being the predominant means of radionuclide movement and the rate of movement will result in the performance objectives being met. In no case will waste disposal be permitted in the zone of fluctuation of the water table.

G. The hydrogeologic unit used for disposal shall not discharge ground water to the surface within the disposal site.

H. Areas shall 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 this part (20.3.13 NMAC), or preclude any defensible modeling and prediction of long-term impacts.

I. Areas shall 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 this part (20.3.13 NMAC), or may preclude defensible modeling and prediction of long-term impacts.

J. The disposal site must be located where nearby facilities or activities could adversely impact the ability of the site to meet the performance objectives of this part (20.3.13 NMAC) or significantly mask the environmental monitoring program.

[5-3-95; 20.3.13.1321 NMAC - Rn, 20 NMAC 3.1.13.1321, 04/15/2004]

20.3.13.1322 DISPOSAL SITE DESIGN FOR LAND DISPOSAL: Disposal site design for near-surface disposal.

A. Site design features shall be directed toward long-term isolation and avoidance of the need for continuing active maintenance after site closure.

B. The disposal site design and operation shall be compatible with the disposal site closure and stabilization plan, and lead to disposal site closure that provides reasonable assurance that the performance objectives will be met.

C. The disposal site shall be designed to complement and improve, where appropriate, the ability of the disposal site's natural characteristics to assure that the performance objectives will be met.

D. Covers shall be designed to minimize to the extent practicable water infiltration, to direct percolating or surface water away from the disposed waste, and to resist degradation by surface geologic processes and biotic activity.

E. Surface features shall 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.

F. The disposal site shall be designed to minimize to the extent practicable the contact of water with waste during storage, the contact of standing waste with water during disposal, and the contact of percolating or standing water with wastes after disposal.

[5-3-95; 20.3.13.1322 NMAC - Rn, 20 NMAC 3.1.13.1322, 04/15/2004]

20.3.13.1323 LAND DISPOSAL FACILITY OPERATION AND DISPOSAL SITE CLOSURE: Near-surface disposal facility operation and disposal site closure.

A. Wastes designated as class A, pursuant to 20.3.13.1324 NMAC, shall be segregated from other wastes by placing them in disposal units that are sufficiently separated from disposal units for the other waste classes so that any interaction between class A wastes and other wastes will not result in the failure to meet the performance objectives of this part (20.3.13 NMAC). This segregation is not necessary for class A wastes if they meet the stability requirements in Subsection B of 20.3.13.1325 NMAC.

B. Wastes designated as class C pursuant to 20.3.13.1324 NMAC shall be disposed of so that the top of the waste is a minimum of 5 meters below the top surface of the cover, or must be disposed of with intruder barriers that are designed to protect against an inadvertent intrusion for at least 500 years.

C. Except as provided in Subsection L of 20.3.13.1323 NMAC, only waste classified as class A, B or C shall be acceptable for near-surface disposal. All waste shall be disposed of in accordance with requirements of Subsections D through L of 20.3.13.1323 NMAC.

D. Wastes shall be emplaced in a manner that maintains the package integrity during emplacement, minimizes the void spaces between packages, and permits the void spaces to be filled.

E. Void spaces between waste packages shall be filled with earth or other material to reduce future subsidence within the fill.

F. Waste shall be placed and covered in a manner that limits the radiation dose rate at the surface of the cover to levels that at a minimum will permit the licensee to comply with all provisions of sections 20.3.4.413 NMAC and 20.3.4.414 NMAC at the time the license is transferred pursuant to 20.3.13.1314 NMAC.

G. The boundaries and locations of each disposal unit shall be accurately located and mapped by means of a land survey. Near-surface disposal units shall 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, shall be established on the site to facilitate surveys. The USGS or NGS control stations shall provide horizontal and vertical controls as checked against USGS or NGS record files.

H. A buffer zone of land shall be maintained between any buried waste and the disposal site boundary and beneath the disposed waste. The buffer zone shall be of adequate dimensions to carry out environmental monitoring activities specified in Subsection D of 20.3.13.1328 NMAC and take mitigative measures if needed.

I. Closure and stabilization measures as set forth in the approved site closure plan shall be carried out as each disposal unit is filled and covered.

J. Active waste disposal operations shall not have an adverse effect on completed closures and stabilization measures.

K. Only wastes containing or contaminated with radioactive material shall be disposed of at the disposal site.

L. Proposals for disposal of waste that is not generally acceptable for near-surface disposal because the waste form and disposal methods must be different, and in general, be more stringent than those specified for class C waste, must be submitted to the department for approval.

[5-3-95; 20.3.13.1323 NMAC - Rn, 20 NMAC 3.1.13.1323, 04/15/2004; A, 04/30/2009]

20.3.13.1324 WASTE CLASSIFICATION: Classification of waste for near surface disposal.

A. **Considerations.** Determination of the classification of radioactive waste involves two considerations. First, consideration must be given to the concentration of long-lived radionuclides (and their shorter-lived precursors) whose potential hazard will persist long after such precautions as institutional controls,

improved waste form, and deeper disposal have ceased to be effective. These precautions delay the time when long-lived radionuclides could cause exposures. In addition, the magnitude of the potential dose is limited by the concentration and availability of the radionuclide at the time of exposure. Second, consideration must be given to the concentration of shorter-lived radionuclides for which requirements in institutional controls, waste form and disposal methods are effective. Additional consideration must be given to ensure that such waste is not regulated by RCRA.

B. Classes of waste.

(1) Class A waste is waste that is usually segregated from other waste classes at the disposal site. The physical form and characteristics of class A waste must meet the minimum requirements set forth in Subsection A of 20.3.13.1325 NMAC. If class A waste also meets the stability requirements set forth in Subsection B of 20.3.13.1325 NMAC, it is not necessary to segregate the waste for disposal.

(2) Class B waste is waste that must meet more rigorous requirements of waste form to ensure stability after disposal. The physical form and characteristics of class B waste must meet both the minimum and stability requirements set forth in 20.3.13.1325 NMAC.

(3) Class C waste is waste that not only must meet more rigorous requirements on waste form to ensure stability but also requires additional measures at the disposal facility to protect against inadvertent intrusion. The physical form and characteristics of class C waste must meet both the minimum and stability requirements set forth in 20.3.13.1325 NMAC.

C. Classification determined by long-lived radionuclides. If radioactive waste contains only radionuclides listed in table 1324.1, classification shall be determined as follows:

- (1) if the concentration does not exceed 0.1 times the value in table 1324.1, the waste is class A;
- (2) if the concentration exceeds 0.1 times the value in table 1324.1 but does not exceed the value in table 1324.1, the waste is class C;
- (3) if the concentration exceeds the value in table 1324.1, the waste is not generally acceptable for near-surface disposal; and
- (4) for wastes containing mixtures of radionuclides listed in table 1324.1, the total concentration shall be determined by the sum of fractions rule described in Subsection G of 20.3.13.1324 NMAC.

TABLE 1324.1 Radionuclide	
Concentration	Curies per Cubic Meter(M ³)
C-14	8
C-14 in activated metal	80
N-59 in activated metal	220
Nb-94 in activated metal	0.2
Tc-99	3
I-129	0.08
Alpha emitting transuranic nuclides with half life greater than 5 years	¹ 100
Pu-241	¹ 3,500
Cm-242	¹ 20,000
Ra-226	100
NOTE: To convert the Ci/M ³ to gigabecquerel (G bq) per cubic meter, multiply the Ci/M ³ by 37.	

¹Units are nanocuries per gram.

D. Classification determined by short-lived radionuclides. If radioactive waste does not contain any of the radionuclides listed in table 1324.1, classification shall be determined based on the concentration shown in table 1324.2. However, as specified in Subsection F of 20.3.13.1324 NMAC, if radioactive waste does not contain any nuclides listed in either table 1324.1 or table 1324.2, it is class A.

- (1) If the concentration does not exceed the value in table 1324.2, column 1, the waste is class A.
- (2) If the concentration exceeds the value in table 1324.2, column 1, but does not exceed the value in column 2, the waste is class B.
- (3) If the concentration exceeds the value in table 1324.2, column 2, but does not exceed the value in column 3, the waste is class C.
- (4) If the concentration exceeds the value in table 1324.2, column 3, the waste is not generally acceptable for near-surface disposal.
- (5) For wastes containing mixtures of the nuclides listed in table 1324.2, the total concentration shall be determined by the sum of fractions rule described in Subsection G of 20.3.13.1324 NMAC.

TABLE 1324.2			
Radionuclide	Concentration, Curies Per Cubic Meter		
	Col. 1	Col. 2	Col. 3
Total of all nuclides with less than 5 year Half-life	700	(¹)	(¹)
H-3	40	(¹)	(¹)
Co-60	700	(¹)	(¹)
Ni-63	3.5	70	700
Ni-63 in activated metal	35	700	7000
Sr-90	0.04	150	7000
Cs-137	1	44	4600

NOTE: To convert the Ci/M³ to gigabecquerel (GBq) per cubic meter, multiply the C/M³ by 37.

E. Classification determined by both long and short-lived radionuclides. If radioactive waste contains a mixture of radionuclides, some of which are listed in table 1324.1, and some of which are listed in table 1324.2, classification shall be determined as follows.

- (1) If the concentration of a nuclide listed in table 1324.1 does not exceed 0.1 times the value listed in table 1324.1, the class shall be that determined by the concentration of nuclides in table 1324.2.
- (2) If the concentration of a nuclide listed in table 1324.1 exceeds 0.1 times the value listed in table 1324.1 but does not exceed the value in table 1324.1, the waste shall be class C, provided the concentration of nuclides listed in table 1324.2 does not exceed the value shown in column 3 of table 1324.2.

F. Classification of wastes with radionuclides, other than those listed in tables 1324.1 and 1324.2. If radioactive waste does not contain any nuclides listed in either table 1324.1 or table 1324.2, it is class A.

G. The sum of the fractions rule for mixtures of radionuclides. For determining classification for waste that contains a mixture of radionuclides, it is necessary to determine the sum of fractions by dividing each nuclide's concentration by the appropriate limit and adding the resulting values. The appropriate limits must all be

taken from the same column of the same table. The sum of the fractions for the column must be less than 1.0 if the waste class is to be determined by that column. Example: A waste contains Sr-90 in a concentration of 50 Ci/m³ and Cs-137 in a concentration of 22 Ci/m³. Since the concentrations both exceed the values in column 1 of table 1324.2, they must be compared to column 2 values. For Sr-90 fraction 50/150=0.33; for Cs-137 fraction, 22/44=0.5; the sum of the fractions = 0.83. Since the sum is less than 1.0, the waste is class B.

H. Determination of concentrations in wastes. The concentration of a radionuclide may be determined by indirect methods, such as use of scaling factors which relate the inferred concentration of one radionuclide to another that is measured, or radionuclide material accountability, if there is reasonable assurance that the indirect methods can be correlated with actual measurements. The concentration of a radionuclide may be averaged over the volume of the waste, or weight of the waste if the units are expressed as nanocuries per gram. [5-3-95; 20.3.13.1324 NMAC - Rn, 20 NMAC 3.1.13.1324, 04/15/2004]

20.3.13.1325 WASTE CHARACTERISTICS:

A. The following 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 of personnel at the disposal site.

- (1) Waste must not be packaged for disposal in cardboard or fiberboard boxes.
- (2) Liquid waste must be solidified or packaged in sufficient absorbent material to absorb twice the volume of the liquid.
- (3) Solid waste containing liquid shall contain as little free standing and non-corrosive liquid as is reasonably achievable, but in no case shall the liquid exceed 1 percent of the volume.
- (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. This does not apply to radioactive gaseous waste packaged in accordance with Paragraph (7) of Subsection A of 20.3.13.1325 NMAC.
- (6) Waste must not be pyrophoric: Pyrophoric materials contained in waste shall be treated, prepared and packaged to be nonflammable.
- (7) Waste in a gaseous form must be packaged at a pressure that does not exceed 1.5 atmosphere at 20 degrees C. Total activity must not exceed 100 curies per container.
- (8) Waste containing hazardous, biological, pathogenic, or infectious material must be treated to reduce to the maximum extent practicable the potential hazard from the non-radiological materials.
- (9) All RCRA regulations must be met.

B. The requirements in this section are intended to provide stability of the waste. Stability is intended to ensure that the waste does not structurally degrade and affect overall stability of the site through 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 non-dispersible waste.

(1) Waste must have structural stability: A structurally stable waste form will generally maintain its physical dimensions and its form under the expected disposal conditions, such as weight of overburden and compaction equipment, the presence of moisture, and microbial activity and internal factors, such 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 Paragraphs (2) and (3) of Subsection A of 20.3.13.1325 NMAC, liquid wastes, or wastes containing liquid, must be converted into a form that contain as little free standing and non-corrosive liquid as is reasonably achievable, but in no case shall the liquid exceed 1 percent of the volume of the waste when the waste is in a disposal container designed to ensure stability, or 0.5 percent of the volume of the waste for waste processed to a stable form.

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

[5-3-95; 20.3.13.1325 NMAC - Rn, 20 NMAC 3.1.13.1325, 04/15/2004]

20.3.13.1326 LABELING: Each package of waste must be clearly labeled to identify whether it is class A waste, class B waste, or class C waste, in accordance with 20.3.13.1324 NMAC.

[5-3-95; 20.3.13.1326 NMAC - Rn, 20 NMAC 3.1.13.1326, 04/15/2004]

20.3.13.1327 ALTERNATIVE REQUIREMENTS FOR WASTE CLASSIFICATION AND CHARACTERISTICS. The department 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 sections 20.3.13.1316 NMAC through 20.3.13.1320 NMAC.
[5-3-95; 20.3.13.1327 NMAC - Rn, 20 NMAC 3.1.13.1327, 04/15/2004]

20.3.13.1328 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, geochemistry 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 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, and to enable the evaluation of long-term effects and the need for mitigative measures. The monitoring system must be capable of providing early warning of releases of radioactive materials from the disposal site before they leave the site boundary.

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 operation history, and the closure and stabilization of the disposal site. The monitoring system must be capable of providing early warning of releases of radioactive materials from the disposal site before they leave the site boundary.

D. The licensee shall have plans for taking corrective measures if the environmental monitoring program detects migration of radioactive materials which would indicate that the performance objectives may not be met.

[5-3-95; 20.3.13.1328 NMAC - Rn, 20 NMAC 3.1.13.1328, 04/15/2004]

20.3.13.1329 ALTERNATIVE REQUIREMENTS FOR DESIGN AND OPERATIONS. The department may, upon request or on its own initiative, authorize provisions other than those set forth in sections 20.3.13.1322 NMAC through 20.3.13.1328 NMAC 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 this part (20.3.13 NMAC).

[5-3-95; 20.3.13.1329 NMAC - Rn, 20 NMAC 3.1.13.1329, 04/15/2004]

20.3.13.1330 INSTITUTIONAL REQUIREMENTS:

A. Land ownership. Disposal of 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 conduct an 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 institutional control program shall also include, but not be limited to, conducting an environmental monitoring program at the disposal site, periodic surveillance, minor custodial care and other requirements as determined by the department, and shall include administration of funds to cover the costs for these activities. The period of controls will be determined by the department, but controls may not be relied upon for more than 100 years following transfer of control of the disposal site to the owner.

[5-3-95; 20.3.13.1330 NMAC - Rn, 20 NMAC 3.1.13.1330, 04/15/2004]

20.3.13.1331 APPLICANT QUALIFICATIONS 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.

[5-3-95; 20.3.13.1331 NMAC - Rn, 20 NMAC 3.1.13.1331, 04/15/2004]

20.3.13.1332 FUNDING FOR DISPOSAL SITE CLOSURE AND STABILIZATION:

A. The applicant shall provide assurance prior to the commencement of operations that sufficient funds will be available to carry out disposal site closure and stabilization, including:

- (1) decontamination of 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 site owner, the need for ongoing active maintenance is eliminated to the extent practicable and only minor custodial care, surveillance and monitoring are required; these assurances shall be based on department-approved cost estimates reflecting the department-approved plan for disposal site closure and stabilization; the applicant's cost estimates must take into account total 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 department will accept financial sureties that have been consolidated with ear-marked financial or surety arrangements established to meet requirements of federal or other state agencies for such decontamination, closure, and stabilization; the department will accept these arrangements only if they are considered adequate to satisfy the requirements of 20.3.13.1333 NMAC, 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 financial or surety arrangement shall be submitted annually for review by the department to assure that sufficient funds will be available for completion of the closure plan;

D. the amount of the licensee's financial or surety arrangement shall change in accordance with changes in the predicted costs of 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; the financial or surety arrangement shall be sufficient at all times to cover the costs of closure and stabilization of the disposal units that are expected to be used before the next license renewal;

E. the financial or surety arrangement shall be written for a specified period of time and shall be automatically renewed unless the person who issues the surety notifies the department, the beneficiary (the site owner) and the principal (the licensee), not less than 90 days prior to the renewal date, of its intention not to renew; in such situations, 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 department, the beneficiary may collect on the original surety;

F. proof of forfeiture shall 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 shall be clearly stated on any surety instrument;

G. 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 combinations 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 requirements for private sector applicants; and

H. the licensee's financial or surety arrangement shall remain in effect until the closure and stabilization program has been completed and approved by the department and the license has been transferred to the site owner.

[5-3-95; 20.3.13.1332 NMAC - Rn, 20 NMAC 3.1.13.1332, 04/15/2004]

20.3.13.1333 FINANCIAL ASSURANCE FOR INSTITUTIONAL CONTROLS:

A. Prior to the issuance of the license, the applicant shall provide for department approval a binding arrangement 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 shall be reviewed annually by the department to ensure that changes in inflation, technology and disposal facility operations are reflected in the arrangements.

B. Subsequent changes to the binding arrangements specified in Subsection A of 20.3.13.1334 NMAC relevant to institutional control shall be submitted to the department for prior approval.

[5-3-95; 20.3.13.1333 NMAC - Rn, 20 NMAC 3.1.13.1333, 04/15/2004]

20.3.13.1334 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 department.

B. Records which are required by these regulations or by license conditions shall be maintained for a period specified by the appropriate regulations or by license condition. If a retention period is not otherwise specified, these records must be maintained and transferred to the officials specified in Subsection D of

20.3.13.1334 NMAC as a condition of license termination, unless the department otherwise authorizes their disposition.

C. Records which shall be maintained pursuant to this part (20.3.13 NMAC) 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. The record may also be stored in electronic media with the capability for producing legible, accurate and complete records during the required retention period. Records, such as letters, drawings and specifications, must include all pertinent information such as stamps, initials and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

D. If there is a conflict between the department's regulations in this part (20.3.13 NMAC), license condition, or other written department approval or authorization pertaining to the retention period for the same type of record, the longest retention period specified takes precedence.

E. Notwithstanding Subsections A through D of 20.3.13.1334 NMAC, the licensee shall record the location and the quantity of radioactive wastes contained in the disposal site and transfer these records 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 department at the time of license termination.

F. Following receipt and acceptance of a shipment of radioactive waste, the licensee shall record the date that the shipment is received at the disposal facility, the date of disposal of the waste, a traceable shipment manifest number, a description of any engineered barrier or structural overpack provided for disposal of the waste, the location of disposal at the disposal site, the containment integrity of the waste disposal containers as received, any discrepancies between materials listed on the manifest and those received, the volume of any pallets, bracing, or other shipping or onsite generated materials that are contaminated, and are disposed of as contaminated or suspect materials, and any evidence of leaking or damaged disposal containers or radiation or contamination levels in excess of limits specified in U.S. department of transportation and department regulations. The licensee shall briefly describe any repackaging operations of any of the disposal containers included in the shipment, plus any other information required by the department as a license condition. The licensee shall retain these records until the department transfers or terminates the license that authorizes the activities described in this section.

G. Each licensee authorized to dispose of radioactive 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.

H. Each licensee authorized to dispose of waste materials received from other persons, pursuant to this part (20.3.13 NMAC), 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.

(1) The reports shall include:

(a) specification of the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in airborne effluents during the preceding year;

(b) the results of the environmental monitoring program;

(c) a summary of licensee disposal unit survey and maintenance activities;

(d) a summary, by waste class, of activities and quantities of radionuclides disposed of;

(e) any instances in which observed site characteristics were significantly different from those described in the application for a license; and

(f) any other information the department may require.

(2) 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 specifically address those differences.

I. Any transfer of radioactive materials by the licensee is subject to the requirements in 20.3.3.323 NMAC of these regulations.

J. In addition to the other requirements of this section, the licensee shall store, or have stored manifest and other information pertaining to receipt and disposal of radioactive waste in an electronic record keeping system.

(1) The manifest information that must be electronically stored is:

(a) that required in 20.3.4.466 NMAC of these regulations, with the exception of shipper and carrier telephone numbers, and shipper and consignee certifications; and

(b) that information required in Subsection F of 20.3.13.1334 NMAC.

(2) As specified in facility license conditions, the licensee shall report the stored information, or subsets of this information, on a computer-readable medium.

[5-3-95, N, 7-30-99; 20.3.13.1334 NMAC - Rn, 20 NMAC 3.1.13.1334, 04/15/2004]

20.3.13.1335 TESTS ON LAND DISPOSAL 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 (20.3.13 NMAC), including, but not limited to, tests of:

- A. wastes;
- B. facilities used for the receipt, storage, treatment, handling or disposal of wastes;
- C. radiation detection and monitoring instruments; or
- D. other equipment and devices used in connection with the receipt, possession, handling, treatment, storage or disposal of waste.

[5-3-95, N, 7-30-99; 20.3.13.1335 NMAC - Rn, 20 NMAC 3.1.13.1335, 04/15/2004]

20.3.13.1336 DEPARTMENT INSPECTIONS OF LAND DISPOSAL FACILITIES:

A. Each licensee shall afford to the department at all reasonable times, opportunity to inspect waste not yet disposed of and the premises, equipment, operations and facilities in which wastes are received, possessed, handled, treated, stored or disposed.

B. Each licensee shall make available to the department for inspection, upon reasonable notice, records kept by the licensee 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.

[5-3-95; 20.3.13.1336 NMAC - Rn, 20 NMAC 3.1.3.1336, 04/15/2004]

HISTORY OF 20.3.13 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed as follows:

EIB 73-2, Regulations for Governing the Health and Environmental Aspects of Radiation filed on 7-9-73;

EIB 73-2, Amendment 1, Regulations for Governing the Health and Environmental Aspects of Radiation filed on 4-17-78;

EIB RPR-1, Radiation Protection Regulations filed on 4-21-80;

EIB RPR-1, Amendment 1, Radiation Protection Regulations filed on 10-13-81;

EIB RPR-1, Amendment 2, Radiation Protection Regulations filed on 12-15-82; and

EIB RPR-1, Radiation Protection Regulations filed on 3-10-89.

History of Repealed Material: [RESERVED]

Other History: EIB RPR 1, Radiation Protection Regulations, filed 03-10-1989 renumbered and reformatted to 20 NMAC 3.1; Radioactive Materials and Radiation Machines, effective 05-03-1995; 20 NMAC 3.1; Radioactive Materials and Radiation Machines (filed 04-03-1995) internally renumbered, reformatted and replaced by 20 NMAC 3.1, Radioactive Materials and Radiation Machines, effective 07-30-1999. 20 NMAC 3.1.Subpart 13, Licensing Requirements for Land Disposal of Radioactive Waste (filed 06-17-1999) reformatted, amended and replaced by 20.3.13 NMAC, Licensing Requirements for Land Disposal of Radioactive Waste, effective 04/15/2004.