

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 9 SOLID WASTE
PART 4 SOLID WASTE AND REGISTERED FACILITY MAXIMUM SIZE,
SITING CRITERIA, AND DESIGN CRITERIA

20.9.4.1 ISSUING AGENCY. New Mexico Environmental Improvement Board.
[20.9.4.1 NMAC - Rp, 20 NMAC 9.1.I.001, 08/02/07]

20.9.4.2 SCOPE. This part applies to the transportation, storage, transfer, processing, transformation, recycling, composting, nuisance abatement and disposal of solid waste.
[20.9.4.2 NMAC - Rp, 20 NMAC 9.1.I.002, 08/02/07]

20.9.4.3 STATUTORY AUTHORITY. NMSA 1978, Sections 74-1-1 to 74-1-15, NMSA 1978, Sections 74-9-1 to 74-9-43, and NMSA 1978 Sections 74-13-1 to 74-13-20.
[20.9.4.3 NMAC - Rp, 20 NMAC 9.1.I.003, 08/02/07]

20.9.4.4 DURATION. Permanent.
[20.9.4.4 NMAC - Rp, 20 NMAC 9.1.I.004, 08/02/07]

20.9.4.5 EFFECTIVE DATE. August 2, 2007, unless a later date is cited at the end of a section. [20.9.4.5 NMAC - Rp, 20 NMAC 9.1.I.005, 08/02/07]

20.9.4.6 OBJECTIVE. The objective of Part 4 of Chapter 9 is to establish regulations governing solid waste and registered facility size, siting criteria and design criteria.
[20.9.4.6 NMAC - Rp, 20 NMAC 9.1.I.006, 08/02/07]

20.9.4.7 DEFINITIONS. [RESERVED]
[See 20.9.2.7 NMAC for Definitions.]

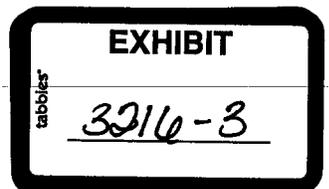
20.9.4.8 MAXIMUM SIZE. The secretary shall not issue a permit for any solid waste facility larger than 500 acres.
[20.9.4.8 NMAC - Rp, 20 NMAC 9.1.III.301, 08/02/07]

20.9.4.9 SITING CRITERIA FOR MUNICIPAL, OR SPECIAL WASTE, CONSTRUCTION AND DEMOLITION LANDFILLS, AND MONOFILLS.

A. No municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is:

(1) in a floodplain, within 500 feet of a wetlands, or within 200 feet of a watercourse unless the watercourse has been altered pursuant to an approval from the army corps of engineers or other appropriate authority;

(2) where the top of the uppermost aquifer will be closer than 100 feet to the bottom of the fill, or for construction and demolition landfills that do not accept more than 25 tons per day annual average, where the top of the uppermost aquifer will be closer than 50 feet to the bottom of the fill;



(3) where new, abandoned, or exploration subsurface mines registered with the New Mexico department of energy, minerals and natural resources a may pose a risk of subsidence or instability;

(4) within 200 feet of a fault that has had a displacement within Holocene time (i.e., the past 11,000 years), unless the owner or operator demonstrates to the secretary that an alternative setback of less than 200 feet will prevent damage to the structural integrity of the facility and will be protective of public health, welfare and the environment;

(5) within historically or archaeologically significant sites, unless in compliance with the Cultural Properties Act, NMSA 1978, Sections 18-6-1 to 18-6-23 and the Prehistoric and Historic Sites Preservation Act, NMSA 1978, Sections 18-8-1 to 18-8-8;

(6) within 1,000 feet of a public water supply well or a private drinking water supply well with a sustainable yield of 100 gallons per minute or more, unless, in the case of registered unpermitted landfills, the well was constructed after the landfill began operations;

(7) within 350 feet of a public water supply well or private well with a maximum sustainable yield of less than 100 gallons per minute, unless the well was constructed after the landfill began operations or the well was installed by the landfill owner or operator for operational use;

(8) within the distance to airports set by the federal aviation administration unless the landfill owner or operator demonstrates that the federal aviation administration does not object to construction and operation of the landfill at the proposed site;

(9) within 50 feet of the facility property boundaries nor within 500 feet of a permanent residence, school, hospital, institution or church, or unless, in the case of registered unpermitted landfills, the permanent residence, school, hospital, institution or place of worship was constructed after the landfill began operations;

(10) in an active alluvial fan (i.e., areas being currently aggraded by either permanent or intermittent streams;

(11) within areas that will result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in either 50 CFR Part 17 or by the New Mexico department of game and fish in its most recent biennial review;

(12) within seismic impact zones, unless the owner or operator demonstrates that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site; or

(13) within an unstable area, unless the owner or operator demonstrates that engineering measures have been incorporated into the landfill design to ensure that the integrity of the structural components of the landfill will not be disrupted.

B. Category 3 landfills that cannot make the demonstration specified in Paragraph (1) of Subsection A of this section pertaining to floodplains or Paragraph (8) of Subsection A of this section pertaining to airports, or Paragraph (13) of Subsection A of this section, pertaining to unstable areas, shall close in accordance with the closure and post-closure provisions in 20.9.6 NMAC.

[20.9.4.9 NMAC - Rp, 20 NMAC 9.1.III.302, 08/02/07]

20.9.4.10 SITING CRITERIA FOR COMPOSTING FACILITIES THAT ACCEPT SOLID WASTE. No composting facility that accepts solid waste shall be located:

A. in a floodplain, within 500 feet of a wetland, or within 200 feet of a watercourse, unless the watercourse has been altered pursuant to an approval from the army corps of engineers or other appropriate authority; or

B. within 500 feet of any permanent residence, school, hospital, institution or place of worship in existence at the time the permit application for the facility is filed.

[20.9.4.10 NMAC - Rp, 20 NMAC 9.1.III.304, 08/02/07]

20.9.4.11 SITING CRITERIA FOR TRANSFORMATION FACILITIES.

A. No transformation facility shall be located:

(1) in a floodplain, within 500 feet of a wetland, or within 200 feet of a watercourse unless the watercourse has been altered pursuant to an approval from the army corps of engineers or other appropriate authority;

(2) where new, abandoned or exploration subsurface mines may pose a risk of subsidence, instability, or ground water contamination;

(3) within historically or archaeologically significant sites, unless in compliance with the Cultural Properties Act, NMSA 1978, Sections 18-6-1 to 18-6-23 and the Prehistoric and Historic Sites Preservation Act, NMSA 1978, Sections 18-8-1 to 18-8-8;

(4) within 150 feet of the facility property boundaries; nor

(5) within an unstable area, unless the owner or operator demonstrates that engineering measures have been incorporated into the facility design to ensure that the integrity of the structural components of the facility will not be disrupted.

B. No transformation facility having a throughput capacity of less than 1,000 pounds per hour shall be located within one mile of any residence, institution, school, place of worship, hospital or other transformation facility in existence on the date the initial permit application is filed with the department.

C. No transformation facility having a throughput capacity of 1,000 pounds per hour or greater shall be located within three miles of any residence, institution, school, place of worship, hospital or other transformation facility in existence on the date the initial permit application is filed with the department.

[20.9.4.11 NMAC - Rp, 20 NMAC 9.1.III.305, 08/02//07]

20.9.4.12 SITING CRITERIA FOR TRANSFER STATIONS AND PROCESSING FACILITIES. No transfer station or processing facility initially permitted after the effective date of these regulations shall be located in the following areas:

A. a floodplain, a watercourse, or a wetland, except:

(1) a transfer station property boundary may extend into or cross a floodplain, watercourse, or wetland if those areas will not be impacted by structures or activities of the facility; and

(2) engineering structures designed to prevent impacts to or from a floodplain, watercourse, or wetland may be constructed subject to prior approval of the secretary;

B. within 250 feet of a permanent residence, institution, school, place of worship, or hospital, that existed at the time the transfer station permit application was submitted, unless the applicant demonstrates that a shorter distance of no less than 50 feet has been affirmatively approved by the local government;

C. within an unstable area, except where the owner or operator demonstrates that engineering measures have been incorporated into the facility design to ensure that the integrity

of the structural components of the facility will not be disrupted or unless otherwise approved by the secretary; or

D. within historically or archaeologically significant sites, unless in compliance with the Cultural Properties Act, NMSA 1978, Sections 18-6-1 to 18-6-23 and the Prehistoric and Historic Sites Preservation Act, NMSA 1978, Sections 18-8-1 to 18-8-8.
[20.9.4.12 NMAC - N, 08/02/07]

20.9.4.13 DESIGN CRITERIA FOR MUNICIPAL LANDFILLS, SPECIAL WASTE LANDFILLS AND MONOFILLS.

A. Except as specified in 20.9.2.14 NMAC and Subsection C of this section, all new municipal and special waste landfills and lateral expansions to existing municipal and special waste landfills shall provide a containment layer beneath the solid waste which is constructed:

- (1) with a composite liner consisting of two components;
 - (a) the upper component shall consist of a minimum 30-mil flexible or a 60-mil high density polyethylene (HDPE) geomembrane liner or equivalent material; the geomembrane component shall be installed in direct and uniform contact with the lower component; and
 - (b) the lower component shall consist of a geosynthetic clay liner (GCL) or a minimum 24-inch thick layer of compacted soil having a saturated hydraulic conductivity of no more than 1×10^{-7} centimeters per second (cm/sec) throughout its thickness; the soil must be free of particles greater than one inch in any dimension; or

(2) with an alternative liner in accordance with a design, which provides protection equivalent to the composite liner defined in Paragraph (1) of this subsection.

B. When approving an alternative liner design under this section, the secretary shall consider at least the following factors:

- (1) the climatic factors of the area; and
- (2) the volume and physical and chemical characteristics of the leachate.

C. Asbestos waste monofills and scrap tire monofills may be exempted from the design criteria in this section if the owner or operator demonstrates to the secretary in the permit application that the waste will not generate leachate which poses a threat to ground water quality, but shall still comply with Subparagraph (h) of Paragraph (1) of Subsection A of 20.9.6.9 NMAC.

D. Scrap tire monofills shall be designed with trenches not to exceed a maximum depth of 15 feet, a maximum width of 50 feet, and a maximum length of 100 feet. A distance of 40 feet shall be maintained between trenches. Trenches shall be filled to original grade.

E. The design and construction of all liners shall conform to the following criteria:

- (1) general requirements:
 - (a) all liners must be able to withstand the projected loading stresses and disturbances from overlying waste, waste cover materials, and equipment operation;
 - (b) all liners shall incorporate a leachate collection system that meets the requirements of 20.9.4.15 NMAC; and
 - (c) all liners must be constructed with a minimum two percent slope to promote positive drainage and facilitate leachate collection;
- (2) requirements for geosynthetic components: