

# Appendix 6

Solid Waste

Nevada Administrative Code

444.570 – 444.7499



## SOLID WASTE DISPOSAL

### General Provisions

**NAC 444.570 Definitions.** ([NRS 444.560](#)) As used in [NAC 444.570](#) to [444.7499](#), inclusive, unless the context otherwise requires, the words and terms defined in [NAC 444.5701](#) to [444.631](#), inclusive, have the meanings ascribed to them in those sections.

(Supplied in codification; A by Environmental Comm'n, 12-19-89; 9-2-92; 11-8-93; 3-1-94; R034-98, 4-17-98; R173-99, 2-9-2000)

**NAC 444.5701 "Active life" defined.** ([NRS 444.560](#)) "Active life" means the period of operation of a disposal site beginning with the initial receipt of solid waste and ending at the completion of closure activities in accordance with [NAC 444.6891](#), [444.6892](#) and [444.6893](#).

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.5702 "Administrator" defined.** ([NRS 444.560](#)) "Administrator" means the Administrator of the Division of Environmental Protection of the State Department of Conservation and Natural Resources.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.5703 "Appendix I" defined.** ([NRS 444.560](#)) "Appendix I" means the Appendix I of 40 C.F.R. Part 258.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.57035 "Appendix II" defined.** ([NRS 444.560](#)) "Appendix II" means the Appendix II of 40 C.F.R. Part 258.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.5704 "Aquifer" defined.** ([NRS 444.560](#)) "Aquifer" means a geological formation, group of formations or portion of a formation capable of yielding usable quantities of groundwater to wells and springs.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.57048 "Cell" defined.** ([NRS 444.560](#)) "Cell" means a portion of a municipal solid waste landfill unit which consists of compacted wastes completely enclosed in cover material.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.5705 "Class I site" defined.** ([NRS 444.560](#)) "Class I site" means a disposal site which:

1. Is comprised of at least one municipal solid waste landfill unit including all contiguous land and structures, other appurtenances and improvements on the land used for the disposal of solid waste; and

2. Is not a Class II or Class III site.

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93)

**NAC 444.571 "Class II site" defined.** ([NRS 444.560](#)) "Class II site" means a disposal site:

1. Which is comprised of at least one municipal solid waste landfill unit;

2. Which accepts less than 20 tons of solid waste per day on an annual average;

3. For which there is no evidence of contamination of groundwater originating from the site;  
4. Which serves a community that has no other practicable alternatives for waste management; and

5. Which is located in an area which annually receives no more than 25 inches of precipitation.

↳ The term includes all contiguous land and structures, other appurtenances and improvements on the land used for the disposal of solid waste.

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93)

**NAC 444.5715 “Class III site” defined.** ([NRS 444.560](#)) “Class III site” means a disposal site which accepts only industrial solid waste.

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93)

**NAC 444.572 “Composting” defined.** ([NRS 444.560](#)) “Composting” means a controlled process of biological degradation of solid waste to an inoffensive humus-like product.

[Environmental Comm'n, Solid Waste Mgt Reg. § 1.1, eff. 9-21-77]

**NAC 444.573 “Contaminant” defined.** ([NRS 444.560](#)) “Contaminant” has the meaning ascribed to it in [NRS 445A.325](#).

(Added to NAC by Environmental Comm'n, eff. 9-2-92)

**NAC 444.5735 “Cross-media” defined.** ([NRS 444.560](#)) “Cross-media” means the transfer of a constituent from a medium such as water, land or air, to another medium.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.574 “Disposal site” defined.** ([NRS 444.560](#)) “Disposal site” has the meaning ascribed to it in [NRS 444.460](#).

[Environmental Comm'n, Solid Waste Mgt Reg. § 1.2, eff. 9-21-77]

**NAC 444.576 “Division” defined.** ([NRS 444.560](#)) “Division” means the Division of Environmental Protection of the State Department of Conservation and Natural Resources.

[Environmental Comm'n, Solid Waste Mgt Reg. § 1.3, eff. 9-21-77]

**NAC 444.577 “Existing municipal solid waste landfill unit” defined.** ([NRS 444.560](#)) “Existing municipal solid waste landfill unit” means a municipal solid waste landfill unit which is receiving waste on November 8, 1993.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.578 “Garbage” defined.** ([NRS 444.560](#)) “Garbage” means putrescible animal and vegetable wastes resulting from the handling, storage, sale, preparation, cooking and serving of food.

(Environmental Comm'n, Solid Waste Mgt Reg. § 1.4, eff. 9-21-77)

**NAC 444.5785 “Gas condensate” defined.** ([NRS 444.560](#)) “Gas condensate” means the liquid generated as a result of any processes to recover gas at a municipal solid waste landfill unit.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.579 “Groundwater” defined.** ([NRS 444.560](#)) “Groundwater” means all subsurface water comprising the zone of saturation, including perched water.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.580 “Hazardous waste” defined.** ([NRS 444.560](#)) “Hazardous waste” has the meaning ascribed to it in [NRS 459.430](#).

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.5, eff. 9-21-77]—(NAC A 9-2-92)

**NAC 444.581 “Household waste” defined.** ([NRS 444.560](#)) “Household waste” means any solid waste, including garbage, trash and sanitary wastes, derived from households, including single and multiple family residences, hotels, motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and recreation areas used during the daytime.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.584 “Incinerator” defined.** ([NRS 444.560](#)) “Incinerator” means an engineered apparatus capable of withstanding heat and designed to efficiently reduce solid, semi-solid, liquid or gaseous waste at specified rates, and from which the residues contain little or no combustible material.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.7, eff. 9-21-77]

**NAC 444.585 “Industrial solid waste” defined.** ([NRS 444.560](#))

1. “Industrial solid waste” means solid waste derived from industrial or manufacturing processes, including, but not limited to, the solid waste generated by the:

- (a) Generation of electric power;
- (b) Manufacture of fertilizer and agricultural chemicals;
- (c) Manufacture of food and its related products and by-products;
- (d) Manufacture of inorganic chemicals;
- (e) Manufacture of leather and products made from leather;
- (f) Manufacture of nonferrous metals, including the foundries which manufacture those metals;
- (g) Manufacture of organic chemicals;
- (h) Manufacture of plastics, resins and other miscellaneous products made from plastic;
- (i) Pulp and paper industry;
- (j) Manufacture of rubber and other miscellaneous products made from rubber;
- (k) Manufacture of products made from stone, glass, clay and concrete;
- (l) Manufacture of textiles;
- (m) Manufacture of transportation equipment;
- (n) Treatment of water;
- (o) Manufacture of iron and steel; and
- (p) Construction, refurbishing or demolition of buildings or other structures.

2. The term does not include waste generated by the mining, oil and gas industries.

(Added to NAC by Environmental Comm’n, eff. 9-2-92; A 11-8-93)

**NAC 444.587 “Lateral expansion” defined.** ([NRS 444.560](#)) “Lateral expansion” means a horizontal expansion of the waste boundaries of a disposal site after October 9, 1993.

(Added to NAC by Environmental Comm’n, eff. 9-2-92)

**NAC 444.5875 “Leachate” defined.** ([NRS 444.560](#)) “Leachate” means a liquid which has passed through or emerged from a municipal solid waste landfill unit and contains soluble, suspended or miscible materials removed from the waste within the unit.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.588 “Lift” defined.** ([NRS 444.560](#)) “Lift” means a compacted layer of solid waste, typically consisting of several cells, which is approximately 10 to 15 feet thick, placed within a defined area of a municipal solid waste landfill unit and separated from other lifts on the top and bottom by a layer of cover material.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.9, eff. 9-21-77]—(NAC A 11-8-93)

**NAC 444.589 “Medical waste” defined.** ([NRS 444.560](#)) “Medical waste” has the meaning as ascribed to it in 49 C.F.R. Part 173, Appendix G - “Definition of Regulated Medical Waste,” as that Appendix existed on November 8, 1993.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.591 “Municipal solid waste landfill unit” defined.** ([NRS 444.560](#)) “Municipal solid waste landfill unit” means a discrete area of land or an excavation that receives household waste. A municipal solid waste landfill unit may receive other types of solid waste, including sludge and industrial solid waste. A municipal solid waste landfill unit may be publicly or privately owned. The term does not include an injection well, a surface impoundment, a land application unit or a waste pile, as those terms are defined in 40 C.F.R. § 257.2.

(Added to NAC by Environmental Comm’n, eff. 9-2-92; A 11-8-93; 3-1-94)

**NAC 444.592 “Municipality” defined.** ([NRS 444.560](#)) “Municipality” means any county and any city or town, whether incorporated or unincorporated, and Carson City.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.11, eff. 9-21-77]

**NAC 444.593 “New municipal solid waste landfill unit” defined.** ([NRS 444.560](#)) “New municipal solid waste landfill unit” means a municipal solid waste landfill unit which has not received waste before November 8, 1993.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.594 “Nuisance” defined.** ([NRS 444.560](#)) “Nuisance” means anything which is injurious to health, offensive to the senses, or an obstruction to the free use of property, and thus interferes with the comfortable enjoyment of life or property.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.12, eff. 9-21-77]

**NAC 444.596 “Open burning” defined.** ([NRS 444.560](#)) “Open burning” means the combustion of solid waste without:

1. The control of air to maintain an adequate temperature for efficient combustion;
2. The containment of the reaction in an enclosed device to provide sufficient residence time and mixing for a complete combustion; and
3. The control of the emission of the products resulting from the combustion.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.13, eff. 9-21-77]—(NAC A 11-8-93)

**NAC 444.598 “Open dump” defined.** ([NRS 444.560](#)) “Open dump” means an uncontrolled disposal site where solid waste is disposed of in a manner which does not comply with [NRS 444.630](#), [NAC 444.570](#) to [444.7499](#), inclusive, or any permit issued pursuant thereto.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.14, eff. 9-21-77]—(NAC A 11-8-93; 3-1-94)

**NAC 444.5985 “Operator” defined.** ([NRS 444.560](#)) “Operator” means the person responsible for the overall operation of a disposal site or any part of that site.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.599 “Owner” defined.** ([NRS 444.560](#)) “Owner” means the person who owns a disposal site or any part of that site.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.600 “Pathological wastes” defined.** ([NRS 444.560](#)) “Pathological wastes” means human and animal remains, consisting of carcasses, organs and solid organic waste from hospitals, laboratories, abattoirs, animal pounds and similar sources.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.15, eff. 9-21-77]

**NAC 444.602 “Percolation” defined.** ([NRS 444.560](#)) “Percolation” means the downward movement of water through soil or waste.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.16, eff. 9-21-77]

**NAC 444.604 “Person” defined.** ([NRS 444.560](#)) “Person” includes any state or federal agency, any state, including the State of Nevada, a political subdivision of any state, including the State of Nevada, and an interstate agency or organization.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.17, eff. 9-21-77]—(NAC A 11-8-93)

**NAC 444.605 “Pollutant” defined.** ([NRS 444.560](#)) “Pollutant” has the meaning ascribed to it in [NRS 445A.400](#).

(Added to NAC by Environmental Comm’n, eff. 9-2-92)

**NAC 444.6065 “Postclosure” defined.** ([NRS 444.560](#)) “Postclosure” means the period immediately after a disposal site is closed which lasts in accordance with [NAC 444.6894](#).

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.607 “Public waste storage bin facility” defined.** ([NRS 444.560](#)) “Public waste storage bin facility” means a facility that provides one or more portable waste containers which are used for the collection of solid waste for transport to a solid waste disposal site. The term does not include residential or commercial waste containers that are located on or near a site of waste generation.

(Added to NAC by Environmental Comm’n by R034-98, eff. 4-17-98; A by R105-02, 10-18-2002)

**NAC 444.608 “Putrescible” defined.** ([NRS 444.560](#)) “Putrescible” means capable of being decomposed by microorganisms with sufficient rapidity as to cause nuisances from odors or gases.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.19, eff. 9-21-77]

**NAC 444.609 “Qualified ground-water scientist” defined.** ([NRS 444.560](#)) “Qualified ground-water scientist” means a person who has received a baccalaureate or postgraduate degree in the natural sciences or engineering and has sufficient training and experience in ground-water hydrology and related fields as may be demonstrated by professional certifications or the completion of accredited programs offered by a college or university which enable him to make sound professional judgments regarding the monitoring of groundwater, the fate and transportation of contaminants, and required corrective actions.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.610 “Refuse” defined.** ([NRS 444.560](#))

1. “Refuse” means any:

(a) Garbage.

(b) Sludge from a:

(1) Plant that treats wastewater.

(2) Plant that treats the water supply.

(3) Facility for controlling air pollution.

(c) Other discarded material, including solid, semi-solid, liquid or contained gaseous material, resulting from industrial or commercial operations or community activities.

2. The term does not include:

(a) Any discarded material, including solid, semi-solid, liquid or contained gaseous material, resulting from mining or agricultural activities which is excluded from a plan for a system for the management of solid waste pursuant to [NRS 444.620](#).

(b) Solid or dissolved materials in domestic sewage.

(c) Industrial discharges that are point sources subject to [NRS 445A.465](#).

(d) Source material, special nuclear material or by-product material, as those terms are defined by the Atomic Energy Act of 1954, as that act existed on November 8, 1993.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.20, eff. 9-21-77]—(NAC A 11-8-93)

**NAC 444.612 “Rubbish” defined.** ([NRS 444.560](#)) “Rubbish” means nonputrescible solid waste, consisting of both combustible and noncombustible wastes such as paper, cardboard, abandoned automobiles, tin cans, wood, glass, bedding, crockery and similar materials.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.21, eff. 9-21-77]

**NAC 444.614 “Salvage yard” defined.** ([NRS 444.560](#)) “Salvage yard” means any place where salvaged material is regularly dismantled, accumulated, stored or offered for sale, unless such operations are wholly contained in an approved building.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.23, eff. 9-21-77]

**NAC 444.616 “Salvaging” defined.** ([NRS 444.560](#)) “Salvaging” means the controlled removal of material from the solid waste stream for reuse, sale or recycling.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.22, eff. 9-21-77]

**NAC 444.620 “Scavenging” defined.** ([NRS 444.560](#)) “Scavenging” means the uncontrolled removal of material from the solid waste stream for any purpose in a manner which interferes with the safe, efficient operation of the system.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.25, eff. 9-21-77]

**NAC 444.622 “Solid waste” defined.** ([NRS 444.560](#)) “Solid waste” has the meaning ascribed to it in [NRS 444.490](#).

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.26, eff. 9-21-77]—(NAC A 11-8-93)

**NAC 444.624 “Solid waste management authority” defined.** ([NRS 444.560](#)) “Solid waste management authority” has the meaning ascribed to it in [NRS 444.495](#).

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.27, eff. 9-21-77]—(NAC A 11-8-93)

**NAC 444.626 “Solid waste management system” defined.** ([NRS 444.560](#)) “Solid waste management system” means the entire process of storage, collection, transportation, processing and disposal of solid waste by any person engaging in such process as a business or by any municipality or by any combination thereof.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.28, eff. 9-21-77]

**NAC 444.6265 “Surface impoundment” defined.** ([NRS 444.560](#)) “Surface impoundment” means a facility or part of a facility which is a natural topographic depression, man-made excavation or diked area formed primarily of earthen material or lined with man-made material, which is designed to hold an accumulation of liquid wastes or wastes containing free liquids. The term includes holding storage, settling and aeration pits, ponds and lagoons. The term does not include an injection well.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.628 “Transfer station” defined.** ([NRS 444.560](#)) “Transfer station” means a solid waste processing site where solid waste is transferred from one vehicle to another vehicle or storage device for temporary storage until transferred to a disposal site. Some processing may be included therein. The term does not include public waste storage bin facilities.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.29, eff. 9-21-77]—(NAC A by R034-98, 4-17-98; R105-02, 10-18-2002)

**NAC 444.629 “Uppermost aquifer” defined.** ([NRS 444.560](#)) “Uppermost aquifer” means the aquifer located within the boundaries of a disposal site that is nearest the natural ground surface. The term includes lower aquifers which are hydraulically interconnected within the boundary of the disposal site.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.630 “Vector” defined.** ([NRS 444.560](#)) “Vector” means a living insect or other arthropod or animal (not human) capable of carrying infectious disease from one person or animal to another.

[Environmental Comm’n, Solid Waste Mgt Reg. § 1.30, eff. 9-21-77]

**NAC 444.631 “Waters of the State” defined.** ([NRS 444.560](#)) “Waters of the State” has the meaning ascribed to it in [NRS 445A.415](#).

(Added to NAC by Environmental Comm’n, eff. 9-2-92)

**NAC 444.634 Severability.** ([NRS 444.560](#)) If any of the provisions of [NAC 444.570](#) to [444.7499](#), inclusive, or any application thereof to any person, thing or circumstance is held invalid, it is intended that such invalidity not affect the remaining provisions, or their application, that can be given effect without the invalid provision or application.

[Environmental Comm'n, Solid Waste Mgt Reg. § 2.1.1, eff. 9-21-77]—(NAC A 11-8-93; 3-1-94; R173-99, 2-9-2000)

**NAC 444.636 Adoption by reference of certain provisions of Code of Federal Regulations, United States Geological Survey and Environmental Protection Agency. ([NRS 444.560](#))**

1. The following provisions are hereby adopted by reference:
    - (a) Appendix I to 40 C.F.R. Part 258, as that Appendix existed on November 8, 1993;
    - (b) Appendix II to 40 C.F.R. Part 258, as that Appendix existed on November 8, 1993;
    - (c) The provisions of 40 C.F.R. Part 257.2, as that part existed on November 8, 1993, for the limited purposes of defining “municipal solid waste landfill unit” in [NAC 444.591](#);
    - (d) The United States Geological Survey, Open File Report 82-1033, “Probabilistic Estimates of Maximum Acceleration and Velocity in Rock in the Contiguous United States,” for the limited purpose of defining “seismic impact zone” in [NAC 444.6793](#);
    - (e) “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” Environmental Protection Agency, Publication No. SW-846, for the limited purposes of defining “liquid waste” in [NAC 444.692](#); and
    - (f) The Toxic Substances Control Act Good Laboratory Practice Standards, 40 C.F.R. Part 792, as those standards existed on March 1, 1994, for the limited purpose of conducting scientific studies pursuant to sub-subparagraph (II) of subparagraph (2) of paragraph (b) of subsection 1 of [NAC 444.7492](#).
  2. Volume 40 C.F.R. Parts 190 to 259, inclusive, may be obtained from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250, for the price of \$22.
  3. The report of the United States Geological Survey may be obtained from the United States Geological Survey, Books and Open Files Reports Section, Federal Center, Building 810, Box 25425, Denver, Colorado 80225, at a cost of \$24.50.
  4. Publication No. SW-846 of the Environmental Protection Agency may be obtained from NTIS, United States Department of Commerce, Springfield, Virginia 22161, at a cost of \$243.
  5. The Toxic Substances Control Act Good Laboratory Practice Standards, 40 C.F.R. Part 792, may be obtained from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250, for the price of \$19.
- (Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93; 3-1-94; R202-97, 3-5-98)

**NAC 444.638 Interpretation of provisions. ([NRS 444.560](#))**

1. The provisions of [NAC 444.570](#) to [444.7499](#), inclusive, may not be interpreted to circumvent any of those provisions to make them less effective.
2. If more than one interpretation exists for a provision, the more restrictive interpretation applies.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 2.2.1 & 2.2.2, eff. 9-21-77]—(NAC A 11-8-93; 3-1-94; R173-99, 2-9-2000)

**NAC 444.639 Interrelation with other laws and regulations. ([NRS 444.560](#))** The provisions of [NAC 444.570](#) to [444.7499](#), inclusive, do not waive or circumvent the provisions of [NRS 445A.300](#) to [445A.730](#), inclusive, [445B.100](#) to [445B.640](#), inclusive, [459.400](#) to [459.600](#), inclusive, and [459.800](#) to [459.856](#), inclusive. Each owner and operator shall comply with all

other laws and regulations adopted and orders issued pursuant to those sections governing the disposal of solid waste.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94; R173-99, 2-9-2000)

#### **Provisions Applicable to Solid Waste Management Systems**

##### **NAC 444.640 Open burning; disposal of animal carcasses. ([NRS 444.560](#))**

1. Except as otherwise provided in this section, open burning of solid wastes at a disposal site, transfer station or other facility which handles solid waste is prohibited.

2. The solid waste management authority may approve open burning of yard waste and other untreated wood waste at facilities that serve remote communities if:

(a) There is no other practicable alternative for the management of the waste; and

(b) The burning is done in accordance with [NAC 445B.22067](#).

3. The provisions of [NAC 444.570](#) to [444.7499](#), inclusive, do not prevent the disposal of animal carcasses by burning if such burning is done in accordance with [NAC 445B.22067](#), except that such burning is not allowed at municipal solid waste landfill units and Class III sites covered by those provisions.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 2.3.1 & 2.3.2, eff. 9-21-77]—(NAC A 11-8-93; 3-1-94; R105-02, 10-18-2002)

##### **NAC 444.6405 Permit to operate disposal site: Requirement; exemptions; application. ([NRS 444.560](#))**

1. Except as otherwise provided in subsection 2, the owner or operator of a disposal site must obtain a permit to operate the site from the appropriate solid waste management authority.

2. The following sites are exempt from the provisions of subsection 1:

(a) Composting bins which are operated at a personal residence for personal use; and

(b) Municipal composting operations for yard wastes.

3. The owner or operator of a proposed disposal site must obtain the permit before the construction or operation of that site. An application for the permit must be submitted at least 180 days before the anticipated start of construction, to allow sufficient time for the review and issuance of the permit.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 11-9-95; 10-3-96; R105-02, 10-18-2002)

##### **NAC 444.641 Permit to operate disposal site: Evaluation of application; notice to applicant concerning completeness and compliance; notice of intent to issue or deny application; period for public comment. ([NRS 444.560](#))**

1. A solid waste management authority shall, within 45 days after receiving an application for a permit to operate a disposal site, notify the applicant as to whether the application is complete or deficient in content. A determination of completeness must be based on whether the application contains all specified documents and supporting information required by [NAC 444.677](#), [444.705](#) or [444.733](#), as applicable. The solid waste management authority may require the submittal of any such additional documents or information as it deems necessary and may specify the period within which the documents or information must be submitted to the authority.

2. If the solid waste management authority determines that an application is complete, the authority shall evaluate the merits of the application to determine if the application is in compliance with all applicable statutes and regulations. If the solid waste management authority

determines that the application does not comply with all applicable statutes and regulations, it shall mail a notice to the applicant. The notice must specify:

- (a) Each statute or regulation with which the applicant has failed to comply;
- (b) Any documents or other information which the applicant is required to submit to the authority; and
- (c) The period within which the applicant is required to submit to the authority the documents or other information requested pursuant to paragraph (b).

3. Upon completion of the evaluation, the solid waste management authority shall prepare and issue:

- (a) A notice of intent to issue or deny the issuance of the permit. The notice must:
  - (1) Be sent to the applicant and the local governing body in the area in which the disposal site is to be located, and published in a newspaper of general circulation for the area in which the site is located;
  - (2) Summarize the action to be taken by the solid waste management authority;
  - (3) State that the authority will accept comments from the general public for 30 days after the date that the notice is issued; and
  - (4) Describe the procedure for obtaining copies of the documents and comments submitted with the application.
- (b) A factual sheet which describes the proposed facility, the proposed action, the availability of the documents submitted with the application, and the procedure for public review and comment.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 10-3-96)

**NAC 444.6415 Permit to operate disposal site: Response to notice of intent to issue or deny application; request for public hearing; notice of public hearing. ([NRS 444.560](#))**

1. An applicant for a permit to operate a disposal site and any other interested person may, within 30 days after the notice of intent is issued pursuant to [NAC 444.641](#):

- (a) Submit a written request to the solid waste management authority for a public hearing on the proposed issuance or denial of the permit which must state the nature of the issues which the requester intends to raise at the hearing; or
- (b) Submit written comments on the proposed issuance or denial of the permit to the solid waste management authority.

2. The solid waste management authority:

- (a) May schedule a public hearing if requested pursuant to this section or on its own initiative; and
- (b) Shall publish a notice of a hearing scheduled pursuant to this section at least 30 days before the date of that hearing.

3. The solid waste management authority may extend the period for public review as it deems necessary.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6419 Permit to operate disposal site: Response by solid waste management authority to written comments concerning proposed issuance or denial of permit; publication of written comments. ([NRS 444.560](#))** The solid waste management authority shall issue a statement responding to the written comments on the proposed issuance or denial of a permit to operate a disposal site which are received during the period for public review. A copy of the statement must be sent to the applicant, the person who submitted the written comments, if

different from the applicant, and all other persons who specifically request, in writing, a copy of the statement. A copy of the statement must be made available for inspection by the general public at a location specified by the solid waste management authority.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6425 Permit to operate disposal site: Duties of solid waste management authority after period for public review; modification or placement of conditions based on public comments. ([NRS 444.560](#))**

1. Within 30 days after the end of the period for public review, the solid waste management authority shall:

(a) Issue a permit to operate a disposal site; or

(b) Deny the application and send written notice to the applicant which details the reasons why the application is being denied. The written notice must set forth the time and procedure by which the applicant may appeal the decision of the solid waste management authority.

2. The solid waste management authority may modify or place conditions on a permit issued pursuant to this section based on public comments received concerning the permit.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A by R105-02, 10-18-2002)

**NAC 444.643 Permit to operate disposal site: Issuance; revocation or suspension; requirements for transfer to subsequent owner or operator. ([NRS 444.560](#))** A permit to operate a disposal site issued by a solid waste management authority:

1. Must be issued for the life of the design of the disposal site;

2. May be modified by the solid waste management authority if the statutes or regulations upon which the issuance of the permit is based change, or if a modification is otherwise necessary to protect public health and safety and the environment;

3. Must specify the amount and type of solid waste which the disposal site may receive that is consistent with the design and operational plans of the site;

4. Must be issued for the area and volume of waste specified in the application, if the disposal site is a municipal solid waste landfill unit or Class III site;

5. May be revoked or suspended if written notice is given by the solid waste management authority and the disposal site does not remain in compliance with the applicable statutes and regulations; and

6. Must be issued to a specific operator or owner. A permit may be transferred to a subsequent owner or operator only if the solid waste management authority approves the transfer based on documentation of financial responsibility provided by the new owner or operator.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6435 Permit to operate disposal site: Request for modification; conditions requiring public notice and review. ([NRS 444.560](#))** A permit to operate a disposal site may be modified upon the request of the owner or operator of the disposal site and approval of the solid waste management authority. A proposal to modify a permit may be subject to public notice and 30 days of public review if the proposed modification includes:

1. An increase in the amount or type of solid wastes managed at the site which is inconsistent with the permitted design, operational plans or municipal plans concerning the management of solid waste;

2. A change in the manner of waste management at the site which is inconsistent with the permitted design or operational plans of the site;

3. A substantive change in the:
  - (a) Permitted design of the site;
  - (b) Plans for closure and postclosure;
  - (c) Procedures for monitoring the site and for taking any necessary corrective actions; or
  - (d) The mechanisms for financial assurance; and
4. Any other change which is deemed by the solid waste management authority to require public notice and a public hearing.  
(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.644 Systems for solid waste. ([NRS 444.560](#))**

1. All solid wastes must be:
  - (a) Stored, collected, utilized, treated, processed and disposed of by means that do not create a health hazard, public nuisance or impairment of the environment.
  - (b) Handled in such a manner which does not contribute to breeding of insects and rodents or to support any disease vector.
2. All solid waste systems must be operated in a manner that will not cause or contribute to pollution of:
  - (a) The atmosphere; or
  - (b) Surface or groundwaters of the State.
3. No system for solid waste handling, processing, salvage or disposal may be placed in operation unless approved by the solid waste management authority.  
[Environmental Comm'n, Solid Waste Mgt Reg. §§ 2.5.1-2.5.5, eff. 9-21-77]—(NAC A 9-2-92)

**NAC 444.645 Program for quality assurance and control for construction of required liner system. ([NRS 444.560](#))** The owner or operator of a municipal solid waste landfill unit shall:

1. Develop and carry out a program for quality assurance and quality control for the construction of all liner systems required by [NAC 444.681](#); and
2. Submit a summary of this program to the solid waste management authority before waste may be placed in the municipal solid waste landfill unit.  
(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.646 Disposal of special wastes: Sewage sludge, septic tank pumpings and medical wastes; coverage of burial area. ([NRS 444.560](#))**

1. Sewage sludges, septic tank pumpings and medical wastes may be deposited at a disposal site only if provisions for such disposal are included in the operational plan and approved by the solid waste management authority.
2. A completed special waste burial area must be covered with a layer of suitable cover material compacted to a minimum uniform depth of 36 inches.  
[Environmental Comm'n, Solid Waste Mgt Reg. §§ 2.6.1.1-2.6.1.3, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93)

**NAC 444.648 Disposal of special wastes: Waste tires. ([NRS 444.560](#))**

1. Disposal of waste tires by open dumping is prohibited.
2. Disposal of waste tires by open burning is prohibited.

3. Waste tires which are disposed of by landfilling and which are not incorporated with other wastes in a landfill for which a permit has been issued by a solid waste management authority pursuant to [NAC 444.6405](#) must be chipped, split or otherwise handled in a manner approved by the solid waste management authority which:

- (a) Prevents tires from resurfacing after they have been covered;
- (b) Reduces the possibility of a fire at the landfill;
- (c) Controls vectors; and
- (d) Otherwise protects the environment and public health.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 2.6.2.1-2.6.2.4, eff. 9-21-77]—(NAC A 12-15-94)

**NAC 444.650 Disposal of special wastes: Waste oils. ([NRS 444.560](#))**

1. Large quantities of waste oils, greases, oil sludges or oil soaked wastes must not be placed in any land disposal site unless special provisions for handling and other special precautions are included in the operational plan to prevent fires and pollution of surface or groundwaters.

2. Provisions for handling and disposing of large quantities of waste oils are effective only if approved by the solid waste management authority.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 2.6.3.1-2.6.3.2, eff. 9-21-77]

**NAC 444.652 Disposal of special wastes: Construction and demolition wastes. ([NRS 444.560](#))** Landfills incorporating large quantities of construction and demolition wastes of combustible nature must be cross-sectioned into cells by compacted cover material to prevent spread of accidental fires.

[Environmental Comm'n, Solid Waste Mgt Reg. § 2.6.4.1, eff. 9-21-77]

**NAC 444.654 Disposal of special wastes: Septic tank pumpings and raw sewage. ([NRS 444.560](#))**

1. Septic tank pumpings and raw sewage must not be disposed of by land spreading, unless it is specifically determined and approved in writing by the solid waste management authority that such disposal can be conducted with assured, adequate protection of public health and safety and the environment.

2. The disposal of raw sewage and the septic tank pumpings at a municipal solid waste landfill unit or a Class III site are prohibited.

[Environmental Comm'n, Solid Waste Mgt Reg. § 2.6.5.1, eff. 9-21-77]—(NAC A 11-8-93)

**NAC 444.656 Disposal of special wastes: Untreated sewage sludge. ([NRS 444.560](#))** Untreated sewage sludges must not be:

1. Used as fertilizer on root crops, vegetables, low-growing berries or fruits that may be eaten raw.
2. Applied to land later than 1 year prior to planting, where vegetables are to be grown.
3. Used on grass in public parks or other areas at a time or in such a way that people could unknowingly come in contact with it.
4. Given or sold to the public without their knowledge as to its origin.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 2.6.5.2.1-2.6.5.2.4, eff. 9-21-77]

**NAC 444.658 Plans to manage solid waste. ([NRS 444.560](#))**

1. Every municipality or district board of health must develop a plan for the management of solid waste within the area of its jurisdiction, together with a program for carrying out the plan.

2. The area or region to be included in such plan is the area within the boundaries of each county in the State, except in those instances where an incorporated city develops and carries out a separate plan. This section does not prevent several municipalities from developing a single combined plan.

3. Such plans must be comprehensive in scope so as to provide for all parts of a complete solid waste management system.

4. In those areas where plans for a solid waste management system have already been developed and approved, plans must be updated as necessary to conform with [NAC 444.570](#) to [444.7499](#), inclusive, and submitted to the Division. The updated plan may be in the form of a letter or summary if all necessary items are included.

5. The schedule for carrying out the plan must state the times for putting each part of the plan into effect.

6. All municipalities and district boards of health must submit their respective plans for a solid waste management system on or before October 1, 1994.

7. Every plan must be reviewed and updated as necessary, but not less often than once every 5 years following October 1, 1994.

8. Every plan must be submitted to the Division for its approval. The plan may not be carried out unless it has been approved by the Division.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 2.7.1-2.7.7, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93; 3-1-94)

**NAC 444.660 Standards for storage, collection and transportation set by ordinances. ([NRS 444.560](#))**

1. The storage on the premises, the collection and the transportation to the disposal site of solid waste must generally be according to the pertinent ordinances or regulations of the city, town or county wherein those services are performed.

2. The provisions of [NAC 444.570](#) to [444.7499](#), inclusive, do not abridge the authority of a town, city or county to establish, by ordinance or otherwise, higher standards than those contained in those sections.

3. No system for the storage, collection or transportation of solid waste may be allowed to cause health hazards, public nuisances or otherwise cause or contribute to the impairment of the environment.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 3.1 & 3.2, eff. 9-21-77]—(NAC A 11-8-93; 3-1-94)

**NAC 444.662 Storage of solid wastes before collection. ([NRS 444.560](#))**

1. The owner or occupant, or both, of any premises, business establishment or industry are responsible for the safe and sanitary storage of all solid waste accumulated at the premise until it is removed.

2. All garbage and similar putrescible waste:

(a) Must be stored in:

(1) Durable, nonabsorbent, watertight and easily cleanable containers that are resistant to corrosion and rodents. The covers of such containers must prevent the entry of flies.

(2) Other types of containers acceptable to the solid waste management authority which conform to the intent of [NAC 444.660](#) to [444.666](#), inclusive.

(b) Except as otherwise provided in subsection 5, must not be stored for more than 1 week before collection.

3. The size and allowable weight of the container must be determined by the collection agency, subject to the approval of the solid waste management authority.

4. If garbage and similar putrescible wastes are stored in combination with nonputrescible wastes, containers for the storage of the mixture must meet the requirements for garbage storage.

5. The solid waste management authority may approve the storage of garbage and similar putrescible wastes for more than 1 week before collection in a remote community if the municipality in whose jurisdiction the storage occurs demonstrates that an alternative minimum collection frequency will not result in increased litter or odors, the harboring of vectors, the storage of excess waste outside of containers, or any other health hazard, public nuisance or impairment to the environment. The solid waste management authority may revoke its approval of an alternative minimum collection frequency.

6. Medical wastes must be stored in watertight, tightly covered and clearly labeled containers that are resistant to corrosion and are in a safe location, inaccessible to the public. In addition, medical wastes must be stored in cleanable containers with liners or in a manner approved by the solid waste management authority. Medical wastes must not be deposited in containers with other solid wastes. Medical wastes must be transported separately from other solid wastes to an approved disposal site and handled in accordance with a method approved by the solid waste management authority.

7. Bulky wastes or other nonputrescible wastes unsuitable for storage containers must be stored in a manner that does not cause a nuisance.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 3.3.1-3.3.5, eff. 9-21-77]—(NAC A 11-8-93; R105-02, 10-18-2002)

**NAC 444.664 Collection and transportation of solid wastes. ([NRS 444.560](#))**

1. The owner or occupant, or both, of any premises, business establishment or industry are responsible for the satisfactory and legal arrangement for removal of all solid waste accumulated at the premises.

2. The person collecting or transporting solid waste is responsible for prevention of littering and creation of other nuisances at the loading point and during transport, and for proper unloading at an authorized site or facility for solid waste disposal.

3. Vehicles or containers used for the collection and transportation of garbage and similar putrescible waste or refuse must be tightly covered, leak proof, durable and of easily cleanable construction. The vehicles or containers must be cleaned frequently to prevent nuisances and insect breeding and must be maintained in good repair.

4. Vehicles or containers used for the collection and transportation of any solid waste must be loaded and moved in such a manner that the contents will not fall, leak or spill therefrom and must be covered as necessary to prevent the blowing of material from the vehicle or container. Where spillage does occur, the waste must be picked up immediately by the collector or transporter and returned to the vehicle or container and the area otherwise properly cleaned.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 3.4.1-3.4.4, eff. 9-21-77]

**NAC 444.666 Transfer stations: Design and operating plans. ([NRS 444.560](#))**

1. A transfer station must not be established until the site location and the design and operating plans of the transfer station have been approved by the solid waste management authority.

2. A transfer station must be designed and constructed so as to be esthetically compatible with its environs.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 3.5.1-3.5.3, eff. 9-21-77]—(NAC A by R034-98, 4-17-98)

**NAC 444.6661 Transfer stations: Application to operate or modify. ([NRS 444.560](#))**

1. An application to operate a new transfer station or to modify an existing transfer station must be submitted to the solid waste management authority before construction commences.

2. The application must include:

(a) The name, location and mailing address of:

- (1) The transfer station;
- (2) The owner of the transfer station;
- (3) The operator of the transfer station; and
- (4) The authorized agent of the owner;

(b) Evidence of ownership of the land on which the transfer station will be located;

(c) The report concerning the design of the transfer station, as described in [NAC 444.6662](#);

(d) The plan for operating the transfer station, as described in [NAC 444.6663](#);

(e) Evidence of approval to establish a transfer station from the applicable local government; and

(f) Any other information that the solid waste management authority requires.

(Added to NAC by Environmental Comm'n by R034-98, eff. 4-17-98)

**NAC 444.6662 Transfer stations: Contents of report concerning design. ([NRS 444.560](#))**

The report concerning the design of the transfer station required pursuant to [NAC 444.6661](#) must:

1. Be prepared under the direction of a licensed professional engineer.

2. Be signed and stamped by a professional engineer who is licensed in this State.

3. Include, without limitation, a general location map that shows land use and zoning within a 1-mile radius of the transfer station.

4. Include, without limitation, plans and specifications of the transfer station in sufficient detail to demonstrate compliance with the design standards set forth in [NAC 444.6664](#). The plans must:

(a) Be drawn to a scale of not more than 200 feet per inch and must include, without limitation, contour intervals of not more than 5 feet;

(b) Show existing and proposed contours;

(c) Show access roads and traffic routing inside of and around the transfer station;

(d) Include, without limitation, provisions for the control of surface water runoff and show grades, berms, dikes, swales and other devices used for drainage and control of surface water;

(e) Show fencing, equipment, shelter, employee facilities, waste handling areas and any other appurtenance;

(f) Include, without limitation, provisions for weighing and measuring incoming solid waste;

(g) Include, without limitation, provisions for controlling odors and dust as necessary to prevent a public nuisance;

(h) Define the population and area to be served by the transfer station;

(i) List the anticipated types, quantities and sources of solid waste to be received at the transfer station; and

(j) Provide evidence that the transfer station will be in compliance with the design standards set forth in [NAC 444.6664](#).

(Added to NAC by Environmental Comm'n by R034-98, eff. 4-17-98)

**NAC 444.6663 Transfer stations: Requirements for operating plan. ([NRS 444.560](#))** The operating plan of the transfer station required pursuant to [NAC 444.6661](#) must include, without limitation:

1. Provisions for the control of access to the transfer station;
2. The number of attendants who will be at the transfer station during operating hours;
3. A list of the equipment and machinery that will be used at the transfer station;
4. Procedures for controlling vehicular traffic;
5. The types of wastes that the transfer station will not receive and a list of the facilities where such waste will be directed;
6. A program for detecting and preventing the disposal of regulated hazardous waste and polychlorinated biphenyl wastes;
7. Procedures for measuring or weighing incoming solid waste;
8. The proposed capacity and expected life of the transfer station;
9. The frequency and method of transfer of solid waste to a disposal site;
10. The maximum time that solid waste will be stored at the transfer station;
11. The location of waste storage areas at the transfer station;
12. The proposed operating hours;
13. A contingency plan that describes procedures for emergencies and alternate solid waste handling systems;
14. A plan approved by the local fire authority for the prevention and control of fires;
15. A plan for the management of special wastes that are proposed for acceptance at the facility; and
16. A description of how the transfer station will comply with the operating standards set forth in [NAC 444.66645](#).

(Added to NAC by Environmental Comm'n by R034-98, eff. 4-17-98)

**NAC 444.6664 Transfer stations: Construction. ([NRS 444.560](#))**

1. A transfer station must be constructed with:
  - (a) Any barriers and appurtenances necessary to control access to the station;
  - (b) An all-weather access road;
  - (c) Appurtenances to control litter; and
  - (d) Areas for processing, tipping, sorting and storing that:
    - (1) Are located within a covered enclosure with at least three sides; and
    - (2) Have a floor with a hard surface such as concrete or asphalt pavement and a drainage structure for the recovery of liquids.
2. The transfer station must be constructed to comply with the requirements regarding signs set forth in [NAC 444.690](#).

(Added to NAC by Environmental Comm'n by R034-98, eff. 4-17-98)

**NAC 444.66645 Transfer stations: Handling and salvage of solid waste; maintenance of records; handling of asbestos; removal of remaining waste at final closure. ([NRS 444.560](#))**

1. Any solid waste accepted at a transfer station must be:

(a) Transferred to a disposal site that has been issued a permit by the solid waste management authority; or

(b) Salvaged for reuse or recycling and thereafter promptly removed from the transfer station.

2. A transfer station must be kept in a neat and orderly condition. All residual wastes or other residual material must be promptly removed from the transfer station.

3. Any area that is used for tipping, handling or storing solid waste must be free of standing water. The drainage from the floor of such an area must be discharged into a sewer or its equivalent.

4. A person shall not salvage solid waste from a transfer station unless he:

(a) Is authorized by the solid waste management authority;

(b) Is supervised by the operator of the station;

(c) Stores the salvaged material in clearly identified containers or areas; and

(d) Maintains the salvaged material in a safe, sanitary and orderly manner.

5. The operator of the transfer station shall maintain accurate records of the operations of the station. The records must be furnished upon request to the solid waste management authority or be made available for inspection by the solid waste management authority at any reasonable time. The records must include, without limitation:

(a) A daily log of the quantity of solid waste received and transported;

(b) Instances in which the station rejected a waste load; and

(c) Any emergencies or unusual events.

6. Solid waste must be removed from a transfer station not more than 72 hours after acceptance unless the owner or operator is prevented from doing so because of an emergency such as a fire or flood. The owner or operator shall notify the solid waste management authority not more than 24 hours after an emergency that results in the storage of solid waste for more than 72 hours.

7. The acceptance, handling and transportation of asbestos waste must be conducted pursuant to [NAC 444.965](#) to [444.980](#), inclusive.

8. At the final closure of a transfer station, any remaining wastes must be removed to a disposal site that has been issued a permit by the solid waste management authority.

(Added to NAC by Environmental Comm'n by R034-98, eff. 4-17-98)

**NAC 444.66647 Public waste storage bin facility: Notification of establishment; general requirements; final closure. ([NRS 444.560](#))**

1. The owner of a public waste storage bin facility shall notify the solid waste management authority in writing not more than 30 days after establishing the facility. The notification must include, without limitation:

(a) The location of the facility;

(b) The owner of the facility;

(c) The name and phone number of the authorized agent of the owner;

(d) The capacity of the facility in cubic yards;

(e) The types of solid waste the facility receives; and

(f) The population and area to be served by the facility.

2. Waste storage bins may have a combined capacity of not more than 160 cubic yards and must be constructed of durable, watertight materials with a lid or screen on top that prevents the loss of materials during transport. Storage of solid waste outside of the waste storage bins is prohibited unless approved by the solid waste management authority.

3. Except as otherwise provided in this subsection, if garbage and similar putrescible waste is stored in combination with nonputrescible waste, the wastes must not be stored at the facility for more than 1 week. The solid waste management authority may approve the storage of such waste for more than 1 week before collection in a remote community if the municipality in whose jurisdiction the storage occurs demonstrates that an alternative minimum collection frequency will not result in increased litter or odors, the harboring of vectors, the storage of excess waste outside of containers, or any other health hazard, public nuisance or impairment to the environment. The solid waste management authority may revoke its approval of an alternative minimum collection frequency.

4. The owner of a public waste storage bin facility shall:

(a) Provide access to the facility by an all-weather road;

(b) Construct the facility in a manner that allows the public to deposit waste materials conveniently and safely in the public waste storage bin;

(c) Service the facility as often as is necessary to ensure that there is adequate storage capacity at all times;

(d) Provide for the inspection of the site at least weekly and collect all scattered papers and other lightweight debris;

(e) Use fences and other appurtenances to prevent the scattering of papers and other lightweight debris; and

(f) Comply with the requirements regarding signs set forth in [NAC 444.690](#).

5. At final closure, the owner or operator shall remove any remaining wastes to a proper facility and shall remove all waste storage bins.

(Added to NAC by Environmental Comm'n by R034-98, eff. 4-17-98; A by R105-02, 10-18-2002)

**NAC 444.6665 Operating criteria: Program for detecting and preventing disposal of regulated hazardous waste and PCB wastes. ([NRS 444.560](#))**

1. The owner or operator shall carry out a program at the municipal solid waste landfill unit for detecting and preventing the disposal of regulated hazardous waste and PCB wastes. The program must include, but is not limited to:

(a) Random inspections of incoming loads;

(b) Records of inspections;

(c) Training persons employed at the unit to recognize regulated hazardous waste and PCB wastes;

(d) Procedures for handling hazardous waste or PCB wastes found at the site; and

(e) Notification of the solid waste management authority if hazardous waste or PCB wastes are discovered at the unit.

2. As used in this section:

(a) "Hazardous waste" includes those wastes described by 40 C.F.R. Part 261.3 which are not excluded by 40 C.F.R. Part 261.4(b) or generated by a conditionally exempt small quantity generator in accordance with 40 C.F.R. Part 261.5, as those sections existed on November 8, 1993.

(b) "PCB" has the meaning ascribed to it in 40 C.F.R. Part 761.3, as that section existed on November 8, 1993.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.667 Operating criteria: Control of explosive gas. ([NRS 444.560](#))**

1. An owner or operator shall provide for the control of explosive gas at the municipal solid waste landfill unit in accordance with the provisions of this section.

2. The owner or operator shall ensure that:

(a) The concentration of methane gas generated at the unit does not exceed 25 percent of the lower explosive limit for methane in structures, excluding components for any system to control or recover the gas; and

(b) The concentration of methane gas does not exceed the lower explosive limit for methane at the boundary of the unit.

3. The owner or operator shall carry out a routine program for monitoring methane gas to ensure that the standards set forth in subsection 2 are met. Except as otherwise provided in subsection 4, the level of methane must be monitored at least quarterly each year. The type and frequency of monitoring must be determined based on the:

(a) Conditions of the soil;

(b) Hydrogeologic conditions surrounding the unit;

(c) Hydraulic conditions surrounding the unit; and

(d) Location of the structures and boundaries of the unit.

4. The solid waste management authority may, after public review and comment, allow the owner or operator of a Class II site to monitor the level of methane gas less frequently than one time each quarter. In deciding whether to allow such a deviation, the solid waste management authority shall consider:

(a) The unique characteristics of small communities;

(b) Climatic and hydrogeologic conditions; and

(c) Whether allowing the deviation would have an adverse effect on human health or the environment.

5. If the owner or operator detects levels of methane gas exceeding the limits specified in paragraph (a) of subsection 2, he shall:

(a) Immediately take all necessary actions to ensure protection of public health and safety and notify the solid waste management authority;

(b) Except as otherwise provided in subsection 6, within 7 days after detection, place in the operating records for the unit the levels of methane gas detected and a description of the actions taken to protect public health and safety; and

(c) Except as otherwise provided in subsection 6, within 60 days after detection, carry out a plan for remediation for the releases of methane gas, place a copy of the plan in the operating records and notify the solid waste management authority that the plan has been carried out. The plan must describe the nature and extent of the problem and the proposed remedy.

6. The solid waste management authority may establish alternative schedules for demonstrating compliance with paragraphs (b) and (c) of subsection 5.

7. As used in this section, "lower explosive limit" means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25°C and at atmospheric pressure.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94; R034-98, 4-17-98)

**NAC 444.6675 Operating criteria: Compliance with state implementation plan; open burning of certain solid wastes prohibited. ([NRS 444.560](#))**

1. An owner or operator shall ensure that the municipal solid waste landfill unit does not violate any applicable requirements developed by the state implementation plan, if any, approved or adopted by the Administrator of Environmental Protection Agency pursuant to Section 110 of

the federal Clean Air Act, as amended (42 U.S.C. § 7410), as that section existed on November 8, 1993, and [NRS 445B.100](#) to [445B.640](#), inclusive, and the regulations adopted pursuant thereto.

2. Open burning of solid waste, except for the infrequent burning of agricultural wastes, silvicultural wastes, debris from land clearing, diseased trees or debris from emergency clean-up operations, is prohibited at all municipal solid waste landfill units.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6678 Operating criteria: Vector control.** ([NRS 444.560](#)) An owner or operator shall prevent or control populations of disease vectors at the municipal solid waste landfill unit using techniques appropriate for the protection of public health and safety and the environment. Other than daily cover, appropriate techniques must be instituted whenever required by the solid waste management authority to minimize the transmission of disease.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.668 System to process waste: Hazards, nuisances and impairment of environment prohibited.** ([NRS 444.560](#)) No solid waste processing system may be allowed to cause health hazards, public nuisances or otherwise cause or contribute to the impairment of the environment.

[Environmental Comm'n, Solid Waste Mgt Reg. § 4.1, eff. 9-21-77]

**NAC 444.670 System to process waste: Compost plant.** ([NRS 444.560](#))

1. A compost plant must not be established until the site location, design of the plant and proposed method of operation have been approved by the solid waste management authority and a permit to operate the compost plant has been issued in accordance with the requirements of [NAC 444.6405](#) to [444.6435](#), inclusive. An application for such a permit must include:

(a) A description of the materials to be composted, including a characterization of the waste sufficient to evaluate the potential for biological or chemical contaminant migration in the event of a release;

(b) A layout diagram of the plant showing property boundaries, fencing, roads, principal processing equipment, storage areas for stockpiles of incoming materials and intermediate and final products;

(c) A description of the equipment and personnel necessary to operate the plant;

(d) A description of the process, with a schematic diagram, that shows loading and unloading areas and traffic flow routing;

(e) The maximum inventory, by volume, of feed stocks, intermediate materials and products;

(f) Proposed product specifications and a program to verify conformance with the specifications;

(g) A program for monitoring the parameters of the process, including moisture content and temperature;

(h) A description of the final use for the compost or the available markets for the compost;

(i) Provisions for fire prevention and control;

(j) Provisions for odor prevention and control;

(k) Provisions for the control of surface water runoff and runoff;

(l) Provisions for litter prevention and control;

(m) Contingency plans to be followed in the event of emergencies and unforeseen circumstances that may occur at the facility. The plans must provide, at a minimum, for an organized and coordinated course of action to be taken and address the following situations:

- (1) A fire at the facility;
- (2) A release of hazardous or toxic materials; and
- (3) The shutdown of the facility for any reason; and

(n) Provisions for proper disposal of by-products.

2. Any person or municipality which maintains or operates a compost plant shall maintain and operate the site in conformance with the following standards:

(a) If the compost plant accepts municipal solid waste and is not fully contained within a building, a buffer zone must be maintained of at least 500 feet from the adjoining property and 1,000 feet from any public roads.

(b) Incoming solid waste must be confined to as small an area as practicable. At the conclusion of each day of operation, all windblown material resulting from the operation must be collected and returned to the area.

(c) Materials resulting from composting and offered for sale:

(1) Must meet the requirements relating to the maximum allowable density of fecal coliform or *Salmonella* sp. bacteria for Class A sewage sludge set forth in 40 C.F.R. § 503.32(a);

(2) Must not reheat upon standing;

(3) Must be innocuous; and

(4) Must contain no sharp particles which could cause injury to persons handling the compost.

(d) By-products removed during the processing must be handled in a sanitary and nuisance-free manner and disposed of at a facility approved by the solid waste management authority.

3. A compost plant shall comply with the plans for the design and operation of the facility approved by the solid waste management authority. A compost plant shall not:

(a) Contribute to the pollution of the air or waters of this State;

(b) Cause an impairment of the environment;

(c) Cause a health or safety hazard to employees of the facility or the general public; or

(d) Cause a public nuisance.

4. The solid waste management authority may suspend or revoke a permit to operate a compost plant if the owner or operator of the facility fails to comply with the provisions of [NAC 444.570](#) to [444.7499](#), inclusive.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 4.2.1-4.2.2.4, eff. 9-21-77]—(NAC A by R105-02, 10-18-2002)

**NAC 444.672 System to process waste: Incineration. ([NRS 444.560](#))**

1. An incinerator plant must not be established until the site location, facilities and the proposed method of operation have been approved by the solid waste management authority.

2. All incineration equipment and air pollution control appurtenances thereto must comply with the requirements of [NAC 445B.001](#) to [445B.3689](#), inclusive, and any local regulations governing the construction and operation of incinerators.

3. Incinerators used for the burning of pathological waste, garbage or material of high moisture content must be high temperature types with either grate or solid hearth construction, drying shelves for wet wastes and an auxiliary heating unit to ensure temperatures of 1,400 degrees Fahrenheit for not less than 0.3 second.

4. Any person or municipality which maintains or operates an incinerator must maintain and operate the site in conformance with the following standards:

(a) Adequate storage must be provided for incoming solid wastes and for incinerator residue to assure a nuisance-free operation. Storage facilities must conform to the requirements of [NAC 444.660](#) to [444.666](#), inclusive.

(b) Incinerator residue must be disposed of at an approved land disposal site or in accordance with provisions of an operational plan as approved by the solid waste management authority.

(c) Provisions must be made for emergency disposal of all solid wastes handled by the plant in the event of plant breakdown.

(d) Salvaging, if permitted, must be controlled so as not to interfere with optimum operation or create unsightly conditions or vector harborage.

(e) All quench water, washdown water, dust spray or surface water carrying organic matter must be discharged into a sanitary sewer or otherwise disposed of as provided in an operational plan as approved by the solid waste management authority.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 4.3.1-4.3.4.5, eff. 9-21-77]

**NAC 444.674 System to process waste: Salvage yard. ([NRS 444.560](#))**

1. A salvage yard must not be established until the location, facilities and proposed method of operation have been approved by the solid waste management authority.

2. Salvage in a salvage yard must be stored in an orderly manner so as to prevent harboring rodents, any public nuisance and accidents.

3. All nonsalvageable material must be stored and disposed of according to [NAC 444.570](#) to [444.7499](#), inclusive. In no case may nonsalvageable items be stored for more than 1 week.

4. No garbage or similar putrescible material may be present at a salvage yard, except in approved containers for such materials.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 4.4.1-4.4.4, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93; 3-1-94)

**NAC 444.676 System to process waste: Other methods. ([NRS 444.560](#))** Before any method of solid waste processing, not otherwise provided for in these regulations, is placed into operation, complete plans, specifications and design data must meet the approval of the solid waste management authority.

[Environmental Comm'n, Solid Waste Mgt Reg. § 4.5, eff. 9-21-77]

**NAC 444.6765 Closure of existing municipal solid waste landfill unit for failure to prove compliance with certain provisions. ([NRS 444.560](#))**

1. Except as otherwise provided in this section, an existing municipal solid waste landfill unit which does not file the proof required by [NAC 444.6783](#), [444.6785](#) and [444.6795](#) must close by October 9, 1996, in accordance with [NAC 444.6891](#), [444.6892](#) and [444.6893](#), and must conduct postclosure activities in accordance with [NAC 444.6894](#).

2. The deadline for closure required by this section may be extended for not more than 2 years if the owner or operator demonstrates to the solid waste management authority that there is:

(a) No available alternative for the disposal of waste; and

(b) No immediate threat to public health and safety and the environment.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

## Class I Sites

**NAC 444.6769 Minimum requirements.** ([NRS 444.560](#)) A Class I site must comply with the minimum requirements set forth in [NAC 444.6405](#) to [444.6435](#), inclusive, [444.645](#), [444.6665](#) to [444.6678](#), inclusive, [444.6765](#) to [444.7025](#), inclusive, and [444.7481](#) to [444.7499](#), inclusive. A Class I site which fails to comply with these minimum requirements shall be deemed to be an open dump for the purposes of solid waste planning and is prohibited.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.677 Application for permit to operate Class I site or lateral expansion thereof.** ([NRS 444.553](#), [444.556](#), [444.560](#)) An application for a permit to operate a Class I site or a lateral expansion of a Class I site must be submitted to the solid waste management authority and must include:

1. The name, location and mailing address of the:
  - (a) Site;
  - (b) Owner of the site;
  - (c) Operator of the site; and
  - (d) Authorized agent of the owner.
2. Proof of ownership of the land on which the site will be located.
3. The report of the design of the site required by [NAC 444.680](#).
4. The plan for monitoring water required by [NAC 444.683](#).
5. The plan for operating the site required by [NAC 444.684](#).
6. A plan for closure required by [NAC 444.6895](#).
7. A plan for postclosure required by [NAC 444.6896](#).
8. A copy of the financial assurance required by [NAC 444.685](#).
9. Any additional information which the solid waste management authority may require.

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93)

**NAC 444.678 Location restrictions: Generally.** ([NRS 444.560](#)) The location of a Class I site must:

1. Be easily accessible in all kinds of weather to all vehicles expected to use it.
2. Prevent pollutants and contaminants from the municipal solid waste landfill units at the site from degrading the waters of the State.
3. Prevent uncontrolled migration of gas at the site.
4. Have an adequate quantity of earth cover that is workable and compactible and does not contain organic material of a quantity and distribution conducive to harboring and breeding disease vectors.
5. Conform with land use planning of the area.
6. Not be within one-fourth mile of the nearest inhabited dwelling or place of public gathering or be within 1,000 feet of a public highway, unless special provisions for the beautification of the site and the control of litter and vectors are included in the design and approved by the solid waste management authority.
7. Meet with the approval of the solid waste management authority.
8. Comply with the requirements set forth in [NAC 444.6765](#) and [444.6783](#) to [444.6795](#), inclusive.

9. Unless approved by the solid waste management authority, not be within 1,000 feet of any surface water or 100 feet of the uppermost aquifer if the site is approved after September 2, 1992.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1-5.1.1.7, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93; 3-1-94)

**NAC 444.6783 Location restrictions: Airport safety. ([NRS 444.560](#))**

1. A Class I site must meet the following safety requirements relating to airports:

(a) An owner or operator of a new or existing municipal solid waste landfill unit or a lateral expansion which is located:

(1) Within 10,000 feet of the end of any airport runway used by a turbojet aircraft; or

(2) Within 5,000 feet of the end of any airport runway used only by piston-type aircraft,

↪ shall maintain proof that the unit or lateral expansion is designed and operated so that it does not pose a hazard to aircraft.

(b) The owner or operator shall place the proof in the operating record of the municipal solid waste landfill unit and notify the solid waste management authority that the proof has been placed in the operating records.

(c) The owner or operator who proposes to locate a new municipal solid waste landfill unit or lateral expansion within a 5-mile radius of the end of any airport runway used by a turbojet or piston-type aircraft shall notify the affected airport and the Federal Aviation Administration.

2. As used in this section:

(a) "Airport" means any public airport.

(b) "Hazard to aircraft" means an increase in the likelihood of a collision between a bird and an aircraft that may cause damage to the aircraft or injury to its occupants.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 10-3-96)

**NAC 444.6785 Location restrictions: Floodplains. ([NRS 444.560](#))**

1. The owner or operator of a new or existing municipal solid waste landfill unit or lateral expansion located in a 100-year floodplain shall maintain proof that the unit or lateral expansion will not:

(a) Restrict the flow of the floodplain;

(b) Reduce the temporary capacity of the floodplain to store water; and

(c) Result in the washout of solid waste that poses a hazard to public health and safety and the environment.

2. The owner or operator shall place the proof in the operating records of the municipal solid waste landfill unit and notify the solid waste management authority that the proof has been placed within the operating records.

3. As used in this section, "100-year floodplain" means the lowland and the relatively flat lands adjoining the waters that are inundated by a 100-year flood.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.679 Location restrictions: Wetlands. ([NRS 444.560](#))**

1. A new municipal solid waste landfill unit or a lateral expansion may not be located in wetlands unless the owner or operator satisfactorily demonstrates to the solid waste management authority and the Administrator that:

(a) The presumption, if applicable pursuant to section 404 of the federal Clean Water Act of 1977 (33 U.S.C. § 1344), as that section existed on November 8, 1993, that a practicable

alternative to the proposed unit or lateral expansion is available which does not involve wetland is clearly rebutted.

(b) The construction and operation of the municipal solid waste landfill unit or lateral expansion will not:

(1) Cause or contribute to violations of any applicable state water quality standard set forth in [NAC 445A.450](#) to [445A.492](#), inclusive;

(2) Violate any applicable toxic effluent standard or prohibition set forth in section 307 of the federal Clean Water Act of 1977 (33 U.S.C. § 1317), as that section existed on November 8, 1993;

(3) Jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of a critical habitat, protected by the federal Endangered Species Act of 1973 (16 U.S.C. §§ 1531 et seq.), as that act existed on November 8, 1993; and

(4) Violate any requirement set forth in the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. §§ 1401 et seq.), for the protection of a marine sanctuary, as that act existed on November 8, 1993.

(c) The site will not cause or contribute to any significant degradation of the wetlands. The owner or operator shall demonstrate the integrity of the municipal solid waste landfill unit or lateral expansion and its ability to protect ecological resources by showing:

(1) The potential erosion, stability and migration of the soils, muds and deposits of the wetlands that are used to support the site;

(2) The potential erosion, stability and migration of dredged and fill materials used to support the site;

(3) The volume and chemical composition of the waste managed at the site;

(4) The potential impact on fish, wildlife and other aquatic resources and their habitat;

(5) The potential effects of a catastrophic release of waste to the wetlands and the resulting impacts on the environment; and

(6) Any additional factors required by the solid waste management authority to show that the ecological resources in the wetlands are protected.

(d) To the extent required by section 404 of the Clean Water Act (33 U.S.C. § 1344), as that section existed on November 8, 1993, or any applicable state laws, actions have been taken to attempt to achieve no net loss of wetlands, as defined by acreage and function, by first avoiding impacts to wetlands to the maximum extent practicable as required by paragraph (a), then minimizing the unavoidable impacts to the maximum extent practicable, and then offsetting the remaining unavoidable impacts on the wetlands through all appropriate and practicable mitigation actions such as restoration of existing degraded wetlands or the creation of a man-made wetland.

(e) Sufficient information is available to make a reasonable determination with respect to these demonstrations.

2. As used in this section, "wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and which under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils, including swamps, marshes, bogs and other similar areas.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6791 Location restrictions: Fault areas. ([NRS 444.560](#))**

1. A new municipal solid waste landfill unit or lateral expansion must not be located within 200 feet of a fault that has had a displacement in Holocene time unless the owner or operator

demonstrates to the solid waste management authority that an alternative setback distance of less than 200 feet will prevent damage to the structural integrity of the unit and will protect public health and safety and the environment.

2. As used in this section:

(a) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(b) "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

(c) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6793 Location restrictions: Seismic impact zones. ([NRS 444.560](#))**

1. A new municipal solid waste landfill unit or lateral expansion may not be located in a seismic impact zone, unless the owner or operator submits proof to the solid waste management authority that all structures for containment, including liners, systems for the collection of leachate and systems for the control of surface water, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator shall place the proof in the operating records for the site and notify the solid waste management authority that the proof has been placed in the operating records.

2. As used in this section:

(a) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock which formed by the crystallization of magma or by the induration of loose sediments. The term does not include man-made materials, such as fill, concrete and asphalt, or unconsolidated earth materials, soils or regolith lying at or near the surface of the earth.

(b) "Maximum horizontal acceleration" means the maximum expected horizontal acceleration depicted on a seismic hazard map with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a seismic risk assessment for the specific site.

(c) "Seismic impact zone" means an area with a 10 percent or greater probability that the maximum horizontal acceleration in lithified earth material will exceed 10 percent of the earth's gravitational pull in 250 years, as determined by referencing the United States Geological Survey, Open File Report 82-1033, "Probabilistic Estimates of Maximum Acceleration and Velocity in Rock in the Contiguous United States."

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94)

**NAC 444.6795 Location restrictions: Unstable areas. ([NRS 444.560](#))**

1. The owner or operator of a new or existing municipal solid waste landfill unit or a lateral expansion located in an unstable area shall maintain proof that engineering measures have been incorporated into the structural design of the unit or lateral expansion to ensure that the integrity of the unit or lateral expansion will not be disrupted. The owner or operator shall place the proof in the design report and the operating records of the unit and notify the solid waste management authority that the proof has been placed in the operating records.

2. To determine if an area is unstable, the owner or operator shall consider:

(a) Conditions of the soil on or near the site which may result in a significant differential settling;

- (b) Geologic or geomorphic features on or near the site; and
- (c) Man-made features or events which are on the surface or subsurface.

3. As used in this section:

(a) "Areas susceptible to mass movement" means those areas where the movement of earth material at, beneath or adjacent to the unit, because of natural or man-made features, results in the downslope movement of soil and rock by means of gravitational influence. The term includes, but is not limited to, areas with landslides, avalanches, debris, slides and flows, block slidings and rock falls.

(b) "Karst terranes" means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of the dissolution of limestone, dolomite or soluble rock. The term includes, but is not limited to, areas with sinkholes, sinking streams, caves, large springs and blind valleys.

(c) "Poor foundation conditions" means those areas with features which indicate that a natural or man-made event may result in an inadequate foundation for the structural components of a municipal solid waste landfill unit or lateral expansion.

(d) "Structural components" means liners, systems for leachate collection, final cover, systems for runoff or runoff and any other component used in the construction and operation of a municipal solid waste landfill unit which is necessary for the protection of public health and safety and the environment.

(e) "Unstable area" means a location which is susceptible to natural or man-made features that are capable of impairing the integrity of some or all of the structural components of a municipal solid waste landfill unit that will prevent the release of the solid waste, or any by-product thereof, from that landfill. The term includes poor foundation conditions, areas susceptible to mass movements and karst terranes.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.680 Report of design.** ([NRS 444.560](#)) The report of the design of a Class I site must:

1. Be signed by a professional engineer registered in this State.
2. Include a general location map showing land use and zoning within 1 mile of the disposal site.
3. Include plans and specifications of the facility which are of sufficient detail to show compliance with the applicable design standards and provide a clear understanding of the development of the site. The plan must:
  - (a) Be at a scale of not more than 200 feet to the inch, including contour intervals of not more than 5 feet.
  - (b) Show the topography of the site before the development.
  - (c) Show the proposed limits of excavation and fill areas, including:
    - (1) The final elevations and grades of each municipal solid waste landfill unit on the site;
    - (2) The system for final cover;
    - (3) The location and placement of each system of liners; and
    - (4) Each system for the collection and removal of leachate showing all critical grades and elevations of the inverts and drainage envelopes for the collection pipes, manholes, cleanouts, valves and sumps and showing the thicknesses of the drainage blankets.
  - (d) Show any proposed soil borrow areas.
  - (e) Show the sequence of development for the facility including an outline of fill areas, the sequence of filling operations and the locations of access roads.

- (f) Show access roads, including dimensions, slopes, profiles and the types of pavement to be used.
  - (g) Show a typical cross section of the landfill.
  - (h) Show grades, berms, dikes, swales and other devices for proper drainage and control of surface water, runoff and runoff for the site.
  - (i) Show the devices for monitoring and controlling the gases at the site.
  - (j) Show fencing, equipment shelter, employee facilities and all other features for the development of the site.
4. Define the population and area to be served by the site.
  5. Define the anticipated types, quantities and sources of solid wastes to be disposed of at the site.
  6. Define the source, type and quantity of cover material.
  7. Include proof of compliance with the requirements relating to the control of surface water set forth in [NAC 444.6885](#) and [444.6887](#).
  8. Contain documentation that the disposal site is in compliance with [NAC 444.681](#), including:
    - (a) Appropriate charts and graphs;
    - (b) Soil borings, test pit logs and other relevant geologic information;
    - (c) Engineering calculations; and
    - (d) Other supporting data, including literature citations.
- [Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1.2.1-5.1.2.3.8, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93)

**NAC 444.681 Design criteria. ([NRS 444.560](#))**

1. A new municipal solid waste landfill unit or lateral expansion must be constructed:
    - (a) In accordance with a design approved by the solid waste management authority that is sufficient to protect the waters of the State from degradation by pollutants or contaminants; or
    - (b) With a composite liner and a system for the collection of leachate which is designed and constructed to maintain less than a 30-centimeter depth of leachate over the liner. The composite liner must have an upper component consisting of a flexible membrane liner of at least 30 mils and a lower component consisting of a layer of compacted soil that is at least 2 feet with a hydraulic conductivity of no more than  $10^{-7}$  centimeters per second. Components of the flexible membrane liner consisting of high density polyethylene must be at least 60 mils. The flexible membrane liner must be installed in direct and uniform contact with the compacted soil.
  2. To approve the design of a new municipal solid waste landfill unit or lateral expansion, the solid waste management authority shall consider:
    - (a) The hydrogeologic characteristics of the facility and surrounding land;
    - (b) The climate of the area;
    - (c) The volume and physical and chemical characteristics of the anticipated leachate; and
    - (d) Any other relevant factors.
- (Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.683 Plan for monitoring water; suspension of monitoring requirements. ([NRS 444.560](#))**

1. The plan for monitoring water for a Class I site must provide a complete description of a system capable of monitoring the performance of the design of the site, including monitoring of

the groundwater to detect the release of pollutants or contaminants from the municipal solid waste landfill unit into the waters of the State.

2. The plan must:

(a) Identify the location and construction of monitoring points;

(b) Specify monitoring parameters and the frequency of monitoring those parameters;

(c) Specify procedures for quality assurance for all field and laboratory work;

(d) Provide for the semiannual submittal of monitoring data to the solid waste management authority;

(e) Establish procedures which must be used if monitoring provides evidence of leachate migration; and

(f) Comply with [NAC 444.7481](#) to [444.7499](#), inclusive.

3. The solid waste management authority may suspend monitoring requirements if the owner or operator of a Class I site demonstrates that there is no potential for migration of pollutants or contaminants from the site to waters of the State during the active life of the site, including the period for closure and postclosure. The demonstration must be:

(a) Certified by a qualified ground-water scientist and approved by the solid waste management authority; and

(b) Based on:

(1) Measurements collected at a specific field site, sampling and an analysis of physical, chemical and biological processes affecting the fate and transportation of pollutants or contaminants; and

(2) Predictions of the fate and transportation of the pollutants or contaminants that consider the maximum rate of the migration of contaminants and the impact of the pollutants or contaminants on public health and safety and the environment.

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93)

**NAC 444.6835 Schedule for compliance with monitoring requirements.** ([NRS 444.560](#)) Except as otherwise provided in [NAC 444.7482](#), the owner or operator of a municipal solid waste landfill unit in a Class I site shall comply with the requirements for monitoring groundwater according to the following schedule:

1. An existing municipal solid waste landfill unit and lateral expansion that is less than 1 mile from a surface or subsurface intake for drinking water must comply with [NAC 444.7483](#) to [444.7492](#), inclusive, by October 9, 1994.

2. An existing municipal solid waste landfill unit and lateral expansion that is at least 1 mile but less than 2 miles from a surface or subsurface intake for drinking water must comply with [NAC 444.7483](#) to [444.7492](#), inclusive, by October 9, 1995.

3. An existing municipal solid waste landfill unit and lateral expansion that is at least 2 miles from a surface or subsurface intake for drinking water must comply with [NAC 444.7483](#) to [444.7492](#), inclusive, by October 9, 1996.

4. A new municipal solid waste landfill unit must comply with [NAC 444.7483](#) to [444.7492](#), inclusive, before waste may be placed in the unit.

(Added to NAC by Environmental Comm'n, eff. 11-9-95)

**NAC 444.684 Plan for operating.** ([NRS 444.560](#)) The plan for operating a Class I site must:

1. Include a description of the equipment and persons necessary to operate the site;

2. Provide for:

(a) Adequate fire control methods to extinguish and prevent the spread of accidental fires;

(b) The prevention of scattering of papers and other lightweight debris by portable litter fences or other suitable devices; and

(c) The disposal of any special wastes specifically permitted by the solid waste management authority;

3. Show how the site will comply with the requirements set forth in [NAC 444.6665](#) to [444.6678](#), inclusive, and [444.686](#) to [444.7025](#), inclusive; and

4. Include a plan of action to be taken in the event of an emergency which might occur at the site. The plan must include, without limitation, an organized, coordinated and technically and financially feasible course of action to be taken:

(a) If a fire occurs at the site, including identifying the nearest fire department and how and under what circumstances the fire department will be notified.

(b) To protect the safety of personnel and users of the site, including training for employees on first aid and the availability of emergency services. The site must have a telephone, radio or other similar communication device to enable the personnel to contact the appropriate providers of emergency services.

(c) To shut down the site because of inclement weather or an act of God.

(d) If equipment breaks down, including the provision for and a description of backup equipment.

(e) If hazardous or toxic materials are released from the site.

(f) If the presence of leachate is detected in a structure for the collection of leachate which was previously dry, or if a spill or leak occurs at a tank or surface impoundment for the storage of leachate.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1.2.5-5.1.2.10, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93; 11-9-95)

**NAC 444.685 Financial assurance: Compliance mandatory; exemptions; waiver. ([NRS 444.560](#))**

1. Except as otherwise provided in this section, the owner or operator of a Class I site or lateral expansion of a Class I site shall comply with the provisions of [NAC 444.6851](#) to [444.6859](#), inclusive.

2. Owners or operators of Class I sites:

(a) Who are entities of the State of Nevada or the Federal Government; and

(b) Whose debts and liabilities are the debts and liabilities of the State of Nevada or the Federal Government,

↪ are exempt from the provisions of this section.

3. The solid waste management authority may approve an alternate plan for financial assurance if the alternate plan meets the criteria set forth in [NAC 444.6859](#).

4. The solid waste management authority may waive compliance with the provisions of [NAC 444.6851](#) to [444.6859](#), inclusive, for a period not to extend beyond April 9, 1998, if an owner or operator demonstrates that:

(a) The date for compliance set forth in [NAC 444.6851](#) to [444.6859](#), inclusive, does not provide the owner or operator with sufficient time to comply with the provisions of those sections; and

(b) A waiver will not adversely affect human health and the environment.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94; 10-29-97)

**NAC 444.6851 Financial assurance: Estimate for cost of plan for closure; adjustments to estimate. (NRS 444.560)**

1. The owner or operator shall obtain a detailed written estimate, in current dollars, of the cost of hiring a third person to close the largest area of all municipal solid waste landfill units within the site requiring a final cover as required by [NAC 444.6891](#) at any time during the active life of the unit, in accordance with the plan for closure. The owner or operator shall notify the solid waste management authority that the estimate has been placed in the operating records of the disposal site.

2. The estimate must equal the cost of closing the largest area of all municipal solid waste landfill units within the site requiring a final cover at any time during the active life of the unit when the extent and manner of its operation would make closure the most expensive, as indicated by the plan for closure.

3. During the active life of the municipal solid waste landfill unit, the owner or operator shall annually adjust the estimate for inflation.

4. The owner or operator shall increase the estimate and amount of financial assurance if changes to the plan for closure or conditions at the municipal solid waste landfill unit increase the maximum cost of closure at any time during the remaining active life of the unit.

5. The owner or operator may reduce the estimate and amount of financial assurance if the estimate exceeds the maximum cost of closure at any time during the remaining life of the municipal solid waste landfill unit. The owner or operator shall notify the solid waste management authority that the justification for the reduction has been placed in the operating records of the site.

6. The owner or operator of each municipal solid waste landfill unit shall establish financial assurance for closure of the municipal solid waste landfill unit in compliance with [NAC 444.68525](#) to [444.6859](#), inclusive. The owner or operator shall provide continuous coverage for closure until released by the solid waste management authority from the requirements for financial assurance by demonstrating compliance with [NAC 444.6893](#).

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95)

**NAC 444.68515 Financial assurance: Estimate for cost of program for postclosure; adjustments to estimate. (NRS 444.560)**

1. The owner or operator shall obtain a detailed written estimate, in current dollars, of the cost of hiring a third person to conduct a program for postclosure for each of the municipal solid waste landfill units within the site in compliance with the plan for postclosure developed pursuant to [NAC 444.6894](#). The estimate for postclosure used to demonstrate financial assurance pursuant to subsection 6 must account for the total costs of conducting the program for postclosure, including annual and periodic costs as described in the plan for postclosure over the entire period for postclosure. The owner or operator shall notify the solid waste management authority that the estimate has been placed in the operating records of the unit.

2. The estimate for postclosure must be based on the most expensive costs of postclosure during the period for postclosure.

3. During the active life of the municipal solid waste landfill unit and the period for postclosure, the owner or operator shall annually adjust the estimate for postclosure for inflation.

4. The owner or operator shall increase the estimate for postclosure and amount of financial assurance if changes in the plan for postclosure or the conditions of the municipal solid waste landfill unit increase the maximum costs of postclosure.

5. The owner or operator may reduce the estimate for postclosure and amount of financial assurance if the estimate exceeds the maximum costs of postclosure remaining over the period for postclosure. The owner or operator shall notify the solid waste management authority that the justification for the reduction has been placed in the operating records of the unit.

6. The owner or operator of each municipal solid waste landfill unit shall establish, in accordance with [NAC 444.68525](#) to [444.6859](#), inclusive, financial assurance for the costs of postclosure as required by [NAC 444.6894](#). The owner or operator shall provide continuous coverage for postclosure until released by the solid waste management authority from the requirements of financial assurance for postclosure by demonstrating compliance with subsection 3 of [NAC 444.6894](#).

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95)

**NAC 444.6852 Financial assurance: Estimate for cost of plan for corrective action; adjustments to estimate. (NRS 444.560)**

1. An owner or operator of a municipal solid waste landfill unit required to undertake a plan for corrective action pursuant to [NAC 444.7497](#), [444.7498](#) and [444.7499](#), shall obtain a detailed written estimate, in current dollars, of the cost of hiring a third person to perform the corrective action in accordance with that plan. The estimate of the corrective action must account for the total cost of activities for corrective action as described in the plan for corrective action for the period of the plan. The owner or operator shall notify the solid waste management authority that the estimate has been placed in the operating records of the unit.

2. The owner or operator shall annually adjust the estimate for inflation until the plan for corrective action is completed in accordance with [NAC 444.7497](#), [444.7498](#) and [444.7499](#).

3. The owner or operator shall increase the estimate for corrective action and amount of financial assurance if changes in the plan for corrective action or conditions at the municipal solid waste landfill unit increase the maximum costs of the corrective action.

4. The owner or operator may reduce the amount of the estimate for corrective action and amount of financial assurance if the estimate exceeds the maximum remaining costs of the corrective action. The owner or operator shall notify the solid waste management authority that the justification for the reduction has been placed in the operating records of the unit.

5. The owner or operator of each municipal solid waste landfill unit required to undertake a plan for corrective action pursuant to [NAC 444.7497](#), [444.7498](#) and [444.7499](#), shall establish, in accordance with [NAC 444.68525](#) to [444.6859](#), inclusive, financial assurance for the most recent plan for corrective action. The owner or operator shall provide continuous coverage for corrective action until released by the solid waste management authority from the requirements of financial assurance for corrective action by demonstrating compliance with [NAC 444.7499](#).

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95; A 11-9-95)

**NAC 444.68525 Financial assurance: Allowable mechanisms. (NRS 444.560)** The mechanisms used to demonstrate financial assurance pursuant to [NAC 444.685](#) must ensure that the money necessary to meet the cost of closure, postclosure and corrective action for known releases of contaminants will be available whenever it is needed. The financial assurance may be in the form of:

1. A trust fund as described in [NAC 444.6853](#);
2. A surety bond guaranteeing payment or performance as described in [NAC 444.68535](#);
3. A letter of credit as described in [NAC 444.6854](#);
4. A policy of insurance as described in [NAC 444.6855](#);

5. A mechanism approved by the solid waste management authority pursuant to [NAC 444.6856](#);

6. An assumption of responsibility by the State as described in [NAC 444.6857](#); or

7. Any combination of the options listed in subsections 1 to 6, inclusive.

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95)

**NAC 444.6853 Financial assurance: Trust fund. ([NRS 444.560](#))**

1. An owner or operator may satisfy the requirements of [NAC 444.685](#) by establishing a trust fund which conforms to the requirements of this section. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. A copy of the trust agreement must be placed in the operating records of the disposal site.

2. The owner or operator shall annually make payments into the trust fund over the term of the period for payment into the fund.

3. If a trust fund is used to demonstrate financial assurance for closure and postclosure, the first payment into the fund must be at least equal to the current estimate of the cost for closure or postclosure, except as otherwise provided in [NAC 444.6857](#), divided by the number of years of the period for payment into the fund. The amount of subsequent payments must be determined by the following formula:

$$\text{Next Payment} = \frac{\text{CE-CV}}{\text{Y}}$$

where:

CE is the current estimate for closure or postclosure, as adjusted for inflation or other changes.

CV is the current value of the trust fund.

Y is the number of years remaining in the period for payment into the fund.

4. If a trust fund is used to demonstrate financial assurance for corrective action, the first payment into the trust fund must be at least equal to one-half of the current estimate of the cost for corrective action, except as otherwise provided in [NAC 444.6857](#), divided by the number of years in the period for payment into the fund. The amount of subsequent payments must be determined by the following formula:

$$\text{Next Payment} = \frac{\text{RB-CV}}{\text{Y}}$$

where:

RB is the most recent estimate of the required balance in the trust fund needed for corrective action.

CV is the current value of the trust fund.

Y is the number of years remaining in the period for payment into the trust fund.

5. The owner or operator shall:

(a) For a trust fund for closure and postclosure, obtain and make the initial payment into the trust fund before April 9, 1997, or the initial receipt of solid waste, whichever is later.

(b) For a trust fund for corrective action, obtain the trust fund and make the initial payment into the trust fund no later than 120 days after the remedy for corrective action has been selected in accordance with the requirements of [NAC 444.7497](#), [444.7498](#) and [444.7499](#).

(c) Maintain the trust fund until he is no longer required to demonstrate financial responsibility pursuant to [NAC 444.6851](#), [444.68515](#) and [444.6852](#).

6. If the owner or operator establishes a trust fund after having used one or more alternate mechanisms specified in [NAC 444.68525](#), the first payment into the trust fund must be at least equal to the amount which the fund would have contained if the trust fund were established initially and annual payments made pursuant to this section.

7. The owner, operator or any other person authorized to conduct activities for closure, postclosure or corrective action may request reimbursement from the trustee for related expenditures. Requests for reimbursement may be granted by the trustee only if sufficient money is remaining in the trust fund to cover the remaining costs of closure, postclosure or corrective action, and if justification and documentation of the cost is placed in the operating records of the disposal site. The owner or operator shall notify the solid waste management authority that the documentation of the justification for reimbursement has been placed in the operating records and that reimbursement has been received.

8. The owner or operator may terminate the trust fund only if he substitutes alternate financial assurance as specified in this section or is no longer required to demonstrate financial responsibility in accordance with the requirements of [NAC 444.6851](#), [444.68515](#) or [444.6852](#).

9. As used in this section, "period for payment into the fund" means:

(a) In the case of a trust fund for closure or postclosure, the remaining life of the municipal solid waste landfill unit.

(b) In the case of a trust fund for corrective action, over one-half of the estimated length of the program for corrective action.

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95; A 11-9-95)

**NAC 444.68535 Financial assurance: Surety bond guaranteeing payment or performance. ([NRS 444.560](#))**

1. An owner or operator may demonstrate financial assurance for closure or postclosure by obtaining a surety bond guaranteeing payment or performance which conforms to the requirements of this section. An owner or operator may demonstrate financial assurance for corrective action by obtaining a surety bond guaranteeing performance which conforms to the requirements of this section.

2. A bond must:

(a) If for closure and postclosure, be obtained by the owner or operator and become effective before April 9, 1997, or the initial receipt of waste, whichever is later.

(b) If for corrective action, be obtained by the owner or operator and become effective no later than 120 days after the remedy for corrective action has been selected in accordance with the requirements of [NAC 444.7497](#), [444.7498](#) and [444.7499](#).

(c) Be maintained until the owner or operator is no longer required to demonstrate financial responsibility pursuant to [NAC 444.6851](#), [444.68515](#) and [444.6852](#).

3. The owner or operator shall notify the solid waste management authority that a copy of the bond has been placed in the operating records of the disposal site.

4. The surety company issuing the bond must be among those listed as an acceptable surety on federal bonds in Circular 570 of the U.S. Department of the Treasury which is published each July in the Federal Register.

5. Except as otherwise provided in [NAC 444.6858](#), the sum of the bond must be in an amount at least equal to the current estimate for closure, postclosure or corrective action, whichever is applicable.

6. The surety must become liable on the bond if the owner or operator fails to make payments or perform as guaranteed by the bond.

7. In addition to obtaining the surety bond, the owner or operator shall establish a trust fund. The trust fund must meet the requirements of [NAC 444.6853](#), except the requirements for initial payment and subsequent annual payments specified in that section.

8. The surety shall deposit payments made under the terms of the bond directly into the trust fund. Payments from the trust fund must be approved by the trustee.

9. The terms of the bond must authorize the surety to cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the solid waste management authority at least 120 days before cancellation. If the surety cancels the bond, the owner or operator shall obtain alternate financial assurance as specified in [NAC 444.68525](#) to [444.6859](#), inclusive.

10. The owner or operator may cancel the bond only if alternate financial assurance is substituted as specified in [NAC 444.68525](#) to [444.6859](#), inclusive, or the owner or operator is no longer required to demonstrate financial responsibility in accordance with [NAC 444.6851](#), [444.68515](#) or [444.6852](#).

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95; A 11-9-95)

**NAC 444.6854 Financial assurance: Letter of credit. ([NRS 444.560](#))**

1. An owner or operator may satisfy the requirements of [NAC 444.685](#) by obtaining an irrevocable letter of credit which conforms to the requirements of this section.

2. A letter of credit must:

(a) If for closure and postclosure, be obtained by the owner or operator and become effective before April 9, 1997, or the initial receipt of waste, whichever is later.

(b) If for corrective action, be obtained by the owner or operator and become effective no later than 120 days after the remedy for corrective action has been selected in accordance with the requirements of [NAC 444.7497](#), [444.7498](#) and [444.7499](#).

(c) Be maintained until the owner or operator is no longer required to demonstrate financial responsibility pursuant to [NAC 444.6851](#), [444.68515](#) and [444.6852](#).

3. The owner or operator shall notify the solid waste management authority that a copy of the letter of credit has been placed in the operating records of the disposal site.

4. The issuing institution must be an entity which has the authority to issue letters of credit and whose operations are regulated and examined by a federal or state agency.

5. A letter from the owner or operator must be filed with the letter of credit in the operating records that includes:

(a) A reference to the letter of credit by number;

(b) The issuing institution;

(c) The date of issuance;

(d) The name of the owner or operator;

- (e) The address of the disposal site; and
- (f) The amount of money assured.

6. Except as otherwise provided in this section, the letter of credit must be irrevocable and issued for a period of at least 1 year in an amount at least equal to the current estimate for closure, postclosure or corrective action, whichever is applicable. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless the issuing institution has cancelled the letter of credit.

7. The terms of the letter of credit must authorize the issuing institution to cancel the letter of credit by sending notice of cancellation by certified mail to the owner or operator and to the solid waste management authority at least 120 days before the cancellation. If the letter of credit is cancelled by the issuing institution, the owner or operator shall obtain alternate financial assurance.

8. The owner or operator may cancel the letter of credit only if alternate financial assurance is substituted as specified in [NAC 444.68525](#) to [444.6859](#), inclusive, or the owner or operator is released from the requirements of this section in accordance with [NAC 444.6851](#), [444.68515](#) or [444.6852](#).

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95; A 11-9-95)

**NAC 444.6855 Financial assurance: Insurance. ([NRS 444.560](#))**

1. An owner or operator may demonstrate financial assurance for closure and postclosure by obtaining insurance which conforms to the requirements of this section.

2. The insurance must:

(a) Be obtained by the owner or operator and become effective before April 9, 1997, or the initial receipt of waste, whichever is later; and

(b) Be maintained until the owner or operator is no longer required to demonstrate financial responsibility pursuant to [NAC 444.6851](#), [444.68515](#) and [444.6852](#).

3. The insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in this State.

4. The owner or operator shall notify the solid waste management authority that a copy of the policy of insurance has been placed in the operating records of the disposal site.

5. The policy of insurance must guarantee that money will be available to close the municipal solid waste landfill unit whenever final closure occurs or to carry out a program for postclosure whenever the period of postclosure begins, whichever is applicable. The policy must also guarantee that once closure or postclosure begins, the insurer is responsible for paying money to the owner, operator or any other person authorized to conduct the closure or postclosure, up to an amount equal to the face amount of the policy.

6. Except as otherwise provided in [NAC 444.6853](#), the policy of insurance must be issued for a face amount at least equal to the current estimate for closure or postclosure, whichever is applicable. Actual payments by the insurer must not change the face amount, although the insurer's future liability may be lowered by the amount of the payments.

7. An owner, operator or any other person authorized to conduct the closure or postclosure may receive reimbursements for related expenditures. Requests for reimbursement may be granted by the insurer only if the remaining value of the policy is sufficient to cover the remaining costs of the closure or postclosure, and if justification and documentation of the cost is placed in the operating records of the disposal site. The owner or operator shall notify the solid waste management authority that documentation of the justification for reimbursement has been placed in the operating records and that reimbursement has been received.

8. Each policy of insurance must contain a provision allowing the assignment of the policy to a successor owner or operator. The assignment may be conditional upon the consent of the insurer, if the consent is not unreasonably refused.

9. The policy of insurance must provide that the insurer may not cancel, terminate or fail to renew the policy except for a failure to pay the premium. An automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the owner, operator and solid waste management authority at least 120 days before the cancellation. If the insurer cancels the policy, the owner or operator shall obtain alternate financial assurance as specified in [NAC 444.68525](#) to [444.6859](#), inclusive.

10. If a policy of insurance provides coverage for postclosure, the insurer shall, commencing on the date that liability to make payments pursuant to the policy accrues, annually increase the face amount of the policy. The increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equal to 85 percent of the most recent rate of interest for or 85 percent of the equivalent yield announced by the United States Treasury for 26-week treasury bills.

11. The owner or operator may cancel the policy of insurance only if he substitutes alternate financial assurance in accordance with [NAC 444.68525](#) to [444.6859](#), inclusive, or he is no longer required to demonstrate financial responsibility in accordance with the requirements of [NAC 444.6851](#), [444.68515](#) and [444.6852](#).

12. As used in this section, "face amount" means the total amount the insurer is obligated to pay under the policy.

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95; A 11-9-95)

**NAC 444.6856 Financial assurance: Alternate mechanisms approved by solid waste management authority. ([NRS 444.560](#))**

1. An owner or operator may satisfy the requirements of [NAC 444.685](#) by obtaining any other mechanism which:

- (a) Meets the criteria specified in [NAC 444.6859](#); and
- (b) Is approved by the solid waste management authority.

2. A mechanism obtained pursuant to this section must be obtained by the owner or operator:

(a) For closure and postclosure, by April 9, 1997, or before the initial receipt of waste, whichever is later.

(b) For corrective action, no later than 120 days after the remedy for corrective action has been selected in accordance with the requirements of [NAC 444.7497](#), [444.7498](#) and [444.7499](#).

(c) Maintained until the owner or operator is no longer required to demonstrate financial responsibility pursuant to [NAC 444.6851](#), [444.68515](#) and [444.6852](#).

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95; A 11-9-95)

**NAC 444.6857 Financial assurance: Assumption of responsibility by State. ([NRS 444.560](#))** If this State assumes legal responsibility for an owner's or operator's compliance with the requirements for closure, postclosure or corrective action set forth in [NAC 444.570](#) to [444.7499](#), inclusive, or assures that money will be available from the State to cover the related expenses, the owner or operator shall be deemed to be in compliance with the requirements of [NAC 444.685](#). Any assumption of responsibility by this State must meet the criteria specified in [NAC 444.6859](#).

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 4-9-95; A 3-1-94)

**NAC 444.6858 Financial assurance: Use of multiple mechanisms. ([NRS 444.560](#))**

1. Except as otherwise provided in subsection 2, an owner or operator may satisfy the requirements of [NAC 444.685](#) by establishing more than one mechanism for financial assurance per municipal solid waste landfill unit as specified in [NAC 444.6853](#) to [444.6857](#), inclusive. The combination of mechanisms, rather than a single mechanism, must provide financial assurance for an amount at least equal to the current estimate of cost for closure, postclosure or corrective action, whichever is applicable.

2. Any financial assurance provided by:

(a) A corporate parent, if the entity holding the financial mechanism is a subsidiary of the corporate parent or a subsidiary of a subsidiary of the corporate parent; or

(b) Another subsidiary of the corporate parent, if the entity holding the financial mechanism is a subsidiary of the same corporate parent,

↳ may not be combined if the financial statements of the two entities are consolidated.

(Added to NAC by Environmental Comm'n, 11-8-93; eff. 4-9-95)

**NAC 444.6859 Financial assurance: General requirements for all mechanisms. ([NRS 444.560](#))**

1. An entity providing the mechanism used to demonstrate financial assurance pursuant to [NAC 444.685](#) shall reimburse or make payments to the owner, operator or any other person designated by the solid waste management authority, from that mechanism, for expenses in such amounts as the solid waste management authority shall direct in writing.

2. Any such mechanism must:

(a) Ensure that the amount of money assured is sufficient to cover the costs of closure, postclosure or corrective action for known releases of contaminants, when needed;

(b) Ensure that money will be available in a timely fashion, when needed; and

(c) Be legally valid, binding and enforceable under applicable state and federal law.

(Added to NAC by Environmental Comm'n, 11-8-93; eff. 4-9-95)

**NAC 444.686 Operation and maintenance. ([NRS 444.560](#))**

1. The operation and maintenance of a Class I site must be in a manner which will not create odors, unsightliness or other nuisances.

2. The face of the working fill must be kept as narrow as is consistent with safe and efficient operation of equipment.

3. Bulky waste material which may provide for the harborage of rodents must not be used for the final surface of side slopes.

4. The solid wastes must be spread and compacted in thin layers. In the construction of each cell it must be spread into layers that do not exceed 2 feet before compaction. Equipment for compaction must be appropriately sized and must make a minimum of two passes over each layer of waste.

5. Solid waste must not be placed within 200 feet of the boundary line of a Class I site unless a shorter distance is approved by the solid waste management authority. In approving a setback of less than 200 feet, the solid waste management authority shall consider the uses of the surrounding land, the surrounding topography and the operations conducted at the site.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1.3.1-5.1.3.4, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93)

**NAC 444.688 Cover of compacted solid waste.** ([NRS 444.560](#)) The compacted solid waste of a Class I site must be covered as follows:

1. Except as otherwise provided by this section, all solid waste must be covered at the end of each operating day or at more frequent intervals as necessary to control disease vectors, fires, odors, blowing litter and scavenging with at least 6 inches of compacted earthen material.

2. The solid waste management authority may approve alternative materials to be used for compaction and alternative thicknesses of that material if the owner or operator shows that the alternative materials and thicknesses are capable of controlling disease vectors, fires, odors, blowing litter and scavenging without presenting a threat to public health and safety and the environment.

3. The solid waste management authority may grant a temporary waiver from the requirements of subsections 1 and 2 if the owner or operator can show that extreme seasonal climatic conditions make the requirements impractical.

4. Unless otherwise approved by the solid waste management authority, at least 12 inches of compacted earthen material must be placed as an intermediate cover on a fill surface if that surface is not to receive waste for more than 90 days. This subsection does not apply to final fill surfaces.

5. The integrity of daily and intermediate cover must be maintained until further filling or the addition of final cover is made. All cracks, depressions and erosion of the cover for surface and side slopes of fills must be promptly repaired.

6. Daily and temporary cover must be graded to drain runoff of surface water. The top slope must have a grade of not less than 3 percent.

7. Except as otherwise provided in subsection 8, as used in this section, “operating day” means the portion of a day during which a site is accepting and disposing of solid waste.

8. “Operating day” means a period, not to exceed 6 days, that ends with the first interruption of operations which lasts 4 hours if:

(a) The site consistently operates without stopping throughout a 24-hour period; and

(b) The owner or operator demonstrates to the solid waste management authority that:

(1) A daily cover requirement would impose a severe operational constraint on the site; and

(2) Disease vectors, fires, odors, blowing litter and scavenging will be adequately controlled.

[Environmental Comm’n, Solid Waste Mgt Reg. §§ 5.1.3.5.1-5.1.3.5.5, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93; R034-98, 4-17-98)

**NAC 444.6885 System to control runoff and runoff.** ([NRS 444.560](#))

1. The owner or operator of a Class I site shall provide a system to control runoff and runoff.

2. The owner or operator of a Class I site shall design, construct and maintain:

(a) A system to control runoff to prevent flow onto the active portion of the landfill during the peak discharge from a 25-year storm; and

(b) A system to control runoff from the active portion of the landfill to collect and control at least the volume of water resulting from a 24-hour, 25-year storm,

↪ as those durations and frequencies for storms are defined in the “Precipitation Frequency Atlas of the Western United States,” vol. VII-Nevada, prepared by the National Weather Service and National Oceanic and Atmospheric Administration, United States Department of Commerce. The publication may be obtained from the Hydrometeorological Design Studies Center, Office of

Hydrology, National Weather Service, 1325 East-West Highway, Silver Spring, Maryland 20910, at a cost of \$9.

3. Runoff from the active portion of the landfill must be handled in accordance with [NAC 444.6887](#).

4. As used in this section, “active portion” means that part of a municipal solid waste landfill unit which has received or is receiving wastes and which has not been closed in accordance with [NAC 444.6891](#), [444.6892](#) and [444.6893](#).

(Added to NAC by Environmental Comm’n, eff. 11-8-93; A by R202-97, 3-5-98)

**NAC 444.6887 Discharge of pollutants or contaminants into surface waters prohibited.** ([NRS 444.560](#)) The owner or operator of a Class I site shall not:

1. Cause a discharge of pollutants or contaminants from a municipal solid waste landfill unit into the waters of the State or waters of the United States, including wetlands, which violates any requirements of the federal Clean Water Act of 1977, including, but not limited to, the National Pollutant Discharge Elimination System (33 U.S.C. § 1342), as that section existed on November 8, 1993, or [NRS 445A.300](#) to [445A.730](#), inclusive, and the regulations adopted pursuant thereto; or

2. Cause the discharge of a nonpoint source of pollution into the waters of the State or waters of the United States, including wetlands, which violates any requirement of a plan for the management of the quality of water that is applicable in the area or throughout the State and which has been approved pursuant to sections 208 or 319 of the Clean Water Act of 1977 (33 U.S.C. §§ 1288 or 1329), as those sections existed on November 8, 1993, or [NRS 445A.300](#) to [445A.730](#), inclusive, and the regulations adopted pursuant thereto.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.6891 Requirements for design and construction of system for final cover.** ([NRS 444.560](#))

1. The owner or operator of a Class I site shall install a system for a final cover which is designed to minimize infiltration and erosion. Except as otherwise provided in subsection 2, the system must be designed and constructed to:

(a) Have a permeability that is less than or equal to the permeability of any system for a bottom liner or natural subsoils present, or have a permeability no greater than  $1 \times 10^{-5}$  centimeters per second, whichever is less;

(b) Minimize infiltration through the closed municipal solid waste landfill unit by the use of an infiltration layer which contains at least 18 inches of earthen material; and

(c) Minimize erosion of the final cover by the use of an erosion layer which contains at least 6 inches of earthen material which is capable of sustaining the growth of native plants.

2. The solid waste management authority may approve an alternative design for a final cover which includes:

(a) An infiltration layer which achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (a) and (b) of subsection 1; and

(b) An erosion layer which provides equivalent protection from wind and water erosion as the erosion layer specified in paragraph (c) of subsection 1.

3. The final cover must be graded to drain surface water from the cover. The top slope must have a grade of not less than 3 percent. The design of the final cover must be sufficient to control erosion and maintain the stability of the slope.

(Added to NAC by Environmental Comm’n, eff. 11-8-93)

**NAC 444.6892 Notice of intent to close; general requirements concerning closure. ([NRS 444.560](#))**

1. At least 15 days before beginning the closure of a municipal solid waste landfill unit at a Class I site pursuant to subsection 2, an owner or operator shall provide notice to the solid waste management authority of the intent to close the unit.

2. The owner or operator shall begin activities for the closure of the municipal solid waste landfill unit no later than 30 days after the date on which the unit receives the final receipt of wastes or, if the unit has remaining capacity and there is a reasonable likelihood that the unit will receive additional wastes, no later than 1 year after the most recent receipt of wastes. Extensions beyond the 1-year deadline may be granted by the solid waste management authority if the owner or operator demonstrates that the unit has the capacity to receive additional wastes and the owner or operator has taken and will continue to take all actions necessary to prevent threats to public health and safety and the environment from the open unit.

3. Except as otherwise provided in subsections 4 and 5, the owner or operator of a Class I site shall complete activities for the closure of each municipal solid waste landfill unit at the site in accordance with the plan for closure within 180 days after the beginning the closure. Extensions of the period for closure may be granted by the solid waste management authority if the owner or operator demonstrates that closure will, of necessity, take longer than 180 days and that the owner or operator has taken and will continue to take all actions to prevent threats to public health and safety and the environment from the open unit.

4. The owner or operator of a Class I site which stopped receiving waste before November 8, 1993, shall:

(a) Comply with the requirements for a final cover set forth in [NAC 444.6891](#); and

(b) Complete activities for the closure of each municipal solid waste landfill unit at the site by May 8, 1994.

5. The owner or operator of an existing municipal solid waste landfill unit or lateral expansion at a Class I site which accepts less than 100 tons of solid waste per day shall, if the site stops receiving waste before April 9, 1994:

(a) Comply with the requirements for a final cover set forth in [NAC 444.6891](#); and

(b) Complete activities for the closure of each municipal solid waste landfill unit at the site within 180 days after the last receipt of waste.

6. After the closure of each municipal solid waste landfill unit, the owner or operator of the site shall notify the solid waste management authority that a certification, signed by an independent licensed professional engineer and approved by the solid waste management authority verifying that closure has been completed in accordance with the plan for closure, has been placed in the operating record of the site.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94)

**NAC 444.6893 Requirements after closure of all municipal solid waste landfill units within Class I site. ([NRS 444.560](#))**

1. After the closure of all municipal solid waste landfill units within a Class I site, the owner or operator of the site shall:

(a) Record a notation that complies with the requirements of subsection 2 on the deed to the property on which the site is located or on any other instrument which is normally examined during a title search; and

(b) Notify the solid waste management authority that the notation has been recorded and a copy of the notation has been placed in the operating records of the site.

2. The notation on the deed or other instrument must in perpetuity notify any potential purchaser of the property that:

- (a) The land has been used as a landfill; and
- (b) Its use is restricted in accordance with [NAC 444.6896](#).

3. The owner or operator may request permission from the solid waste management authority to remove the notation from the deed or other instrument if all wastes are removed from the site.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6894 Program for postclosure for each municipal solid waste landfill unit within Class I site. ([NRS 444.560](#))**

1. After the closure of each municipal solid waste landfill unit of a Class I site, the owner or operator of the site shall conduct a program for postclosure for that unit. Except as otherwise provided in subsection 2, the program must be conducted for 30 years and consist of at least the following:

(a) The integrity and effectiveness of any final cover must be maintained, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion or other events, and preventing runoff and runoff from eroding or otherwise damaging the final cover.

(b) The system to collect leachate must be maintained and operated in accordance with the requirements in [NAC 444.681](#), if applicable. The solid waste management authority may allow the owner or operator to stop managing leachate if the owner or operator demonstrates that leachate no longer poses a threat to public health and safety and the environment.

(c) The groundwater must be monitored in accordance with [NAC 444.7481](#) to [444.7499](#), inclusive, and the system for monitoring the groundwater must be maintained, if applicable.

(d) The system for monitoring gas must be maintained and operated in accordance with [NAC 444.667](#).

2. The length of the program for postclosure may be:

(a) Decreased by the solid waste management authority if the owner or operator demonstrates that the reduced period is sufficient to protect public health and safety and the environment and this demonstration is approved by the solid waste management authority; or

(b) Increased by the solid waste management authority if it determines that the lengthened period is necessary to protect public health and safety and the environment.

3. After the completion of the program for postclosure for each municipal solid waste landfill unit at a Class I site, the owner or operator shall notify the solid waste management authority that a certification, signed by an independent licensed professional engineer and approved by the solid waste management authority verifying that the program has been completed in accordance with the plan for postclosure, has been placed in the operating record.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6895 Plan for final cover or closure of Class I site. ([NRS 444.560](#))** A plan for closing a Class I site must include:

1. A description of the actions necessary to close all municipal solid waste landfill units within the site at any time during their active life;

2. A description of the final cover required by [NAC 444.6891](#), [444.6892](#) and [444.6893](#);

3. An estimate of the largest area of the municipal solid waste landfill unit which would require final cover at any time during the active life of the unit if the site is closed;

4. An estimate of the total maximum inventory of wastes to be placed on the disposal site during the entire estimated life of the site;

5. The equipment and structures for the removal of wastes, decommissioning and decontamination;

6. The placement and installation of devices to monitor or control water, vadose zone and landfill gases, if necessary; and

7. A schedule for completing all construction and related activities needed to close the disposal site in accordance with [NAC 444.6891](#), [444.6892](#) and [444.6893](#).

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.6896 Plan for postclosure; use of property during or after period of postclosure. ([NRS 444.560](#))**

1. A plan for postclosure which specifies how and at what frequency a municipal solid waste landfill unit will be maintained and monitored during the period of postclosure must include:

(a) A program for monitoring water which complies with the requirements of [NAC 444.7481](#) to [444.7499](#), inclusive;

(b) A program for the inspection and maintenance of:

(1) The final cover;

(2) Structures for drainage and protection from floods; and

(3) Systems for monitoring and controlling landfill gases;

(c) The name, address and telephone number of the person or office to contact about the unit during the period of postclosure;

(d) A description of the planned uses of the property during the period of postclosure; and

(e) Any other information which the solid waste management authority may require.

2. Any use of the property during or after the period of postclosure must not disturb the integrity of the final cover, liners, any other components of the system for containment or the function of the monitoring system unless necessary to comply with the requirements of [NAC 444.570](#) to [444.7499](#), inclusive.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94)

**NAC 444.6897 Maintenance of plans for closure and postclosure in operating records of site. ([NRS 444.553](#), [444.560](#))** The owner or operator of a Class I site shall maintain a copy of the plans for closure and postclosure in the operating records of the site. To receive a permit to operate the disposal site, the plans for closure and postclosure must be placed in the operating records of the disposal site by November 8, 1993, or by the initial receipt of waste, whichever is later. The owner or operator shall notify the solid waste management authority immediately upon placing the plans in its operating records. The owner or operator shall include the plans for closure and postclosure in his application for a permit to operate the site.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.690 Signs. ([NRS 444.560](#))** Signs must be posted that clearly indicate:

1. The owner and operator of the site.

2. The hours of operation.

3. Materials accepted or excluded.

4. Fees charged.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1.3.18.1-5.1.3.18.4, eff. 9-21-77]

**NAC 444.692 Disposal of liquids. ([NRS 444.560](#))**

1. An owner or operator of a Class I site shall restrict the types and amounts of liquids disposed of in a Class I site except as permitted by the solid waste management authority in accordance with subsections 2 and 3.

2. Liquids which are in bulk or not in containers may not be placed in a municipal solid waste landfill unit unless:

(a) The waste is household waste other than septic waste; or

(b) The waste is leachate or gas condensate from the municipal solid waste landfill unit and the new or existing unit or lateral expansion is designed with a composite liner and system for the collection of leachate as described in [NAC 444.681](#).

3. Containers holding liquid waste may not be placed in a municipal solid waste landfill unit unless:

(a) The container is a small container similar in size to a container which would normally be found in household waste;

(b) The container is designed to hold liquids for use other than storage; and

(c) The liquid waste is household waste.

4. As used in this section, "liquid waste" means any waste material which is determined to contain free liquids as a result of a paint filter liquids test, Method 9095, described in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, Environmental Protection Agency, Publication No. SW-846, as adopted by reference in [NAC 444.636](#).

[Environmental Comm'n, Solid Waste Mgt Reg. § 5.1.3.12, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93; 11-9-95; R202-97, 3-5-98)

**NAC 444.694 Putrescible wastes; vector control. ([NRS 444.560](#))**

1. Any dead animals, carrion, slaughterhouse wastes and other highly putrescible wastes accepted at the land disposal site must be placed in a separate trench or area and covered immediately.

2. Vector control must be instituted, whenever necessary in the judgment of the solid waste management authority, to minimize transmission of disease.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1.3.13 & 5.1.3.14, eff. 9-21-77]

**NAC 444.696 Control of erosion and dust. ([NRS 444.560](#))**

1. Suitable grasses must be planted, as required, in completed areas of the landfill to prevent erosion, surface deterioration and fugitive dust.

2. Adequate water must be available at all times for dust control and for compaction of cover material.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1.3.5.6 & 5.1.3.6, eff. 9-21-77]

**NAC 444.698 Access; roads. ([NRS 444.560](#))**

1. Access to a municipal solid waste landfill unit must be controlled as to time of use and as to those authorized to use the site in order to prevent unauthorized vehicular traffic and illegal dumping. Access must be controlled by using artificial or natural barriers, or both, as appropriate, to protect public health and safety and the environment. An attendant must be on duty to control access during hours of operation.

2. Permanent roads may be provided from the public road system to the site. Temporary roads may be provided as necessary to the working face. All roads must be passable during inclement weather.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1.3.11 & 5.1.3.16, eff. 9-21-77]—  
(NAC A 11-8-93)

**NAC 444.700 Facilities for personnel.** ([NRS 444.560](#)) Suitable shelter and sanitary facilities must be provided for operating personnel and waste transport personnel.

[Environmental Comm'n, Solid Waste Mgt Reg. § 5.1.3.10, eff. 9-21-77]

**NAC 444.702 Miscellaneous requirements for operation; quarterly reports; topographic or other volumetric surveys and reports.** ([NRS 444.560](#))

1. Scavenging at a Class I site is prohibited.
2. Salvaging is prohibited at the working face of a Class I site.
3. A Class I site must be inspected daily and all scattered paper and other lightweight debris returned to the fill area and covered.

4. The operator of a Class I site shall establish provisions concerning weighing or otherwise adequately measuring and recording all solid waste delivered to the site.

5. The operation of a Class I site must be approved by the solid waste management authority.

6. The operator of a Class I site shall submit quarterly to the Division a report of the solid waste received at the site. The report must be submitted on a form prescribed by the Division.

7. The operator of a Class I site shall, on or before January 1, 2004, and at least once every 5 years thereafter until the site is closed in accordance with [NAC 444.6891](#), [444.6892](#) and [444.6893](#), conduct a topographic survey, or other volumetric survey approved by the solid waste management authority, of the site and submit a report to the solid waste management authority. Except as otherwise provided in this subsection, each such report must be submitted not later than 5 years after the date on which the immediately preceding report was submitted. Each report must:

- (a) Be signed by a professional engineer registered in this State;
- (b) Be at a scale of not more than 200 feet to the inch, including contour intervals of not more than 5 feet;
- (c) Show the current topography of the site;
- (d) Indicate the remaining volume and disposal capacity of the site;
- (e) Indicate the volume used and waste disposed of since the original report of design; and
- (f) Calculate the remaining life of the site, in years.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.1.3.7-5.1.3.9, 5.1.3.15 & 5.1.3.17, eff. 9-21-77]—(NAC A 9-2-92; R105-02, 10-18-2002)

**NAC 444.7025 Operating records required to be kept; notice to solid waste management authority.** ([NRS 444.560](#))

1. The owner or operator of a Class I site shall record and retain at the site in the operating records or at a location approved by the solid waste management authority, the following information as it becomes available:

(a) Any demonstration of restrictions on location required by [NAC 444.678](#) to [444.6795](#), inclusive;

(b) Records of inspection, training procedures and procedures for notification required by [NAC 444.6665](#);

(c) Results from the monitoring of gas and any remediation plans required by [NAC 444.667](#);

(d) Any documentation relating to the design of the municipal solid waste landfill unit for the placement of leachate or gas condensate in the unit as required by paragraph (b) of subsection 2 of [NAC 444.692](#);

(e) Any demonstration, certification, finding, monitoring, testing or analytical data from the program for monitoring groundwater required by [NAC 444.7481](#) to [444.7499](#), inclusive;

(f) Plans for closure and postclosure and any monitoring, testing or analytical data required by [NAC 444.6891](#) to [444.6896](#), inclusive; and

(g) Any documentation of cost estimates and financial assurance required by [NAC 444.685](#).

2. The owner or operator shall notify the solid waste management authority when the documentation has been placed in or added to the operating records. All information contained in the operating records must be furnished upon request to the solid waste management authority or be made available at all reasonable times for inspection by the solid waste management authority.

3. The solid waste management authority may establish alternative schedules for recordkeeping and notification required by [NAC 444.570](#) to [444.7499](#), inclusive, except for the notification required by paragraph (c) of subsection 1 of [NAC 444.6783](#) and by subsection 3 of [NAC 444.7491](#).

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94)

#### Class II Sites

#### **NAC 444.704 Minimum requirements; operating records; contamination of groundwater. ([NRS 444.560](#))**

1. All Class II sites must comply with the minimum requirements set forth in this section and [NAC 444.706](#) to [444.728](#), inclusive. A Class II site which fails to satisfy the minimum requirements shall be deemed to be an open dump for the purpose of the disposal of solid waste and is prohibited.

2. The owner or operator of a new or existing municipal solid waste landfill unit or a lateral expansion which meets the criteria for a Class II site pursuant to [NAC 444.571](#) shall place in the operating records of the unit such information as necessary to demonstrate how the unit or lateral expansion meets the criteria.

3. An owner or operator of a new or existing municipal solid waste landfill unit or a lateral expansion which meets the criteria for a Class II site who has knowledge that the unit or lateral expansion has contaminated the groundwater shall:

(a) Notify the solid waste management authority of the contamination; and

(b) Comply with the requirements for a Class I site set forth in [NAC 444.645](#), [444.6665](#) to [444.6678](#), inclusive, [444.6765](#) to [444.7025](#), inclusive, and [444.7481](#) to [444.7499](#), inclusive.

[Environmental Comm'n, Solid Waste Mgt Reg. § 5.2, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93)

#### **NAC 444.7045 Provisions for employees; compliance with certain provisions; deviations. ([NRS 444.560](#))**

1. The owner or operator of a Class II site shall provide suitable shelter, drinking water and sanitary facilities for the employees who work at the Class II site.

2. Except as otherwise provided in subsection 3, the owner or operator of a Class II site shall comply with:

(a) [NAC 444.6895](#), for the closure of the municipal solid waste landfill units;

(b) [NAC 444.6894](#) and [444.6896](#), for the postclosure maintenance of municipal solid waste landfill units;

(c) [NAC 444.685](#) to [444.6859](#), inclusive;

(d) [NAC 444.6665](#) to [444.6678](#), inclusive, [444.6885](#), [444.6887](#), [444.692](#), [444.698](#) and [444.7025](#), if the Class II site contains at least one municipal solid waste landfill unit;

(e) [NAC 444.6765](#) and [444.678](#) to [444.6795](#), inclusive; and

(f) [NAC 444.6891](#), [444.6892](#) and [444.6893](#).

3. The solid waste management authority may, after public review and comment, allow the owner or operator to deviate from the provisions concerning the infiltration barrier set forth in [NAC 444.6891](#). In deciding whether to allow the deviation, the solid waste management authority shall consider:

(a) The unique characteristics of small communities;

(b) Climatic and hydrogeologic conditions; and

(c) Whether allowing the deviation would have an adverse effect on human health or the environment.

(Added to NAC by Environmental Comm'n, 11-8-93, eff. 10-9-95; A 3-1-94; 11-9-95, eff. 10-9-97; R034-98, 4-17-98)

**NAC 444.705 Application for permit to operate Class II site or lateral expansion thereof.** ([NRS 444.553](#), [444.556](#), [444.560](#)) An application for a permit to operate a Class II site or a lateral expansion of a Class II site must be submitted to the solid waste management authority and must include:

1. The name, location and mailing address of the:

(a) Site;

(b) Owner of the site;

(c) Operator of the site; and

(d) Authorized agent of the owner.

2. Proof of ownership of the land on which the site will be located.

3. The report for the design of the site required by [NAC 444.708](#).

4. The plan for operating the site required by [NAC 444.712](#).

5. The plan for closing the site, the plan for postclosure and the documentation of the financial assurance required by [NAC 444.704](#).

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93; 10-3-96)

**NAC 444.706 Location.** ([NRS 444.560](#)) The location of a Class II site must:

1. Not be within one-half mile of the nearest inhabited dwelling or place of public gathering or within 1,000 feet of a public highway, unless special provisions for the beautification of the site and the control of litter and vectors are included in the design and approved by the solid waste management authority.

2. Meet with the approval of the solid waste management authority.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.2.1.1-5.2.1.7, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93)

**NAC 444.708 Report for design.** ([NRS 444.560](#)) The report for the design of a Class II site must include a design that:

1. Is intended to protect the waters of the State from degradation by pollutants or contaminants; and

2. Complies with the requirements set forth in subsections 1 to 7, inclusive, of [NAC 444.680](#). [Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.2.2.2-5.2.2.3.8, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93)

**NAC 444.711 Required installation of certain systems.** ([NRS 444.560](#)) The solid waste management authority may require the owner or operator of a Class II site to install:

1. A system for monitoring groundwater which complies with the provisions of [NAC 444.7483](#); or

2. A system for monitoring moisture in the unsaturated zone,  
↪ if the solid waste management authority determines that the system is necessary to protect the waters of the State from degradation by pollutants or contaminants.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94; 11-9-95; 10-3-96)

**NAC 444.712 Plan for operating.** ([NRS 444.560](#)) The plan for operating a Class II site must:

1. Comply with subsections 1, 2 and 4 of [NAC 444.684](#); and

2. Demonstrate how the site will comply with [NAC 444.714](#) to [444.728](#), inclusive, and [444.6665](#) to [444.6678](#), inclusive.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.2.2.6-5.2.2.9, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93)

**NAC 444.714 Operation and maintenance.** ([NRS 444.560](#)) The operation and maintenance of a Class II site must be in accordance with [NAC 444.686](#).

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.2.3.1-5.2.3.4, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93)

**NAC 444.716 Cover of solid wastes.** ([NRS 444.560](#))

1. Except as otherwise provided in subsection 2, solid wastes at a Class II site must be covered in accordance with [NAC 444.688](#).

2. The solid waste management authority may, after public review and comment, allow the owner or operator of a Class II site to cover solid waste less frequently than set forth in [NAC 444.688](#). In deciding whether to allow the deviation, the solid waste management authority shall consider:

(a) The unique characteristics of small communities;

(b) Climatic and hydrogeologic conditions; and

(c) Whether allowing the deviation would have an adverse effect on human health or the environment.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.2.3.5.1-5.2.3.5.4, eff. 9-21-77]—(NAC A 9-2-92; 11-8-93, eff. 10-9-95; 11-9-95, eff. 10-9-97; R034-98, 4-17-98)

**NAC 444.7175 Final cover and closure for certain sites; deviations.** ([NRS 444.560](#))

1. The owner or operator of a Class II site that stops receiving waste before October 9, 1997, shall:

(a) Except as otherwise provided in subsection 2, comply with the requirements for a final cover set forth in [NAC 444.6891](#); and

(b) Complete activities for the closure of each municipal solid waste landfill unit at the site within 180 days after the last receipt of waste.

2. The solid waste management authority may, after public review and comment, allow the owner or operator to deviate from the provisions concerning the infiltration barrier set forth in [NAC 444.6891](#). In deciding whether to allow the deviation, the solid waste management authority shall consider:

- (a) The unique characteristics of small communities;
- (b) Climatic and hydrogeologic conditions; and
- (c) Whether allowing the deviation would have an adverse effect on human health or the environment.

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94; 11-9-95; R034-98, 4-17-98)

**NAC 444.718 Signs.** ([NRS 444.560](#)) Signs must be posted that clearly indicate:

1. The owner and operator of the site.
2. The hours of operation.
3. Materials accepted or excluded.
4. Fees charged.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.2.3.14-5.2.3.14.4, eff. 9-21-77]

**NAC 444.720 Disposal of special wastes.** ([NRS 444.560](#)) Sewage solids or liquids and other special wastes must not be disposed of in a Class II site except when special permission has been given by the solid waste management authority.

[Environmental Comm'n, Solid Waste Mgt Reg. § 5.2.3.8, eff. 9-21-77]—(NAC A 9-2-92)

**NAC 444.722 Putrescible wastes; vector control.** ([NRS 444.560](#))

1. Any dead animals, carrion, slaughterhouse wastes or other highly putrescible wastes accepted at the land disposal site must be placed in a separate trench or area and covered immediately.

2. Vector control must be instituted, whenever necessary in the judgment of the solid waste management authority, to minimize transmission of disease.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.2.3.9 & 5.2.3.10, eff. 9-21-77]

**NAC 444.724 Control of erosion and dust.** ([NRS 444.560](#)) Suitable grasses must be planted, as required, in completed areas of the landfill to prevent erosion, surface deterioration and fugitive dust.

[Environmental Comm'n, Solid Waste Mgt Reg. § 5.2.3.5.5, eff. 9-21-77]

**NAC 444.726 Roads.** ([NRS 444.560](#))

1. Permanent roads should be provided from the public road system to the site.
2. Temporary roads may be provided as necessary to the working face.
3. All roads must be passable during normal inclement weather.

[Environmental Comm'n, Solid Waste Mgt Reg. § 5.2.3.12, eff. 9-21-77]

**NAC 444.728 Miscellaneous requirements for operation; semiannual reports; topographic or other volumetric surveys and reports.** ([NRS 444.560](#))

1. Salvaging is prohibited at the working face of a Class II site. Scavenging is prohibited at a Class II site.

2. A Class II site must be inspected semiweekly and all scattered papers and other lightweight debris returned to the fill area and covered.

3. The operator of a Class II site shall establish provisions concerning weighing or otherwise adequately measuring and recording all solid waste delivered to the site.

4. The operation of a Class II site must be approved by the solid waste management authority.

5. The operator of a Class II site shall:

(a) Comply with the requirements relating to the maintenance and operation of the site set forth in 40 C.F.R. Parts 258.20 to 258.29, inclusive, effective October 9, 1997.

(b) Submit semiannually to the Division a report of the solid waste received at the site. The report must be submitted on a form prescribed by the Division.

(c) On or before January 1, 2004, and at least once every 5 years thereafter until the site is closed in accordance with [NAC 444.6891](#), [444.6892](#) and [444.6893](#), conduct a topographic survey, or other volumetric survey approved by the solid waste management authority, of the site and submit a report to the solid waste management authority. Except as otherwise provided in this paragraph, each such report must be submitted no later than 5 years after the date on which the immediately preceding report was submitted. Each report must:

(1) Be signed by a professional engineer registered in this State;

(2) Be at a scale of not more than 200 feet to the inch, including contour intervals of not more than 5 feet;

(3) Show the current topography of the site;

(4) Indicate the remaining volume and disposal capacity of the site;

(5) Indicate the volume used and waste disposed of since the original report of design; and

(6) Calculate the remaining life of the site, in years.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 5.2.3.6, 5.2.3.7, 5.2.3.11 & 5.2.3.13, eff. 9-21-77]—(NAC A 9-2-92; 11-9-95; R105-02, 10-18-2002)

### Class III Sites

**NAC 444.731 Minimum standards; reduction or waiver of requirements. ([NRS 444.560](#))**

1. Except as otherwise provided in subsections 2 and 3, each Class III site must comply with the standards for location, design, construction, operation and maintenance set forth in [NAC 444.733](#) to [444.747](#), inclusive.

2. A solid waste management authority may adopt less restrictive standards for a Class III site which receives waste material which is inert or unlikely to create an environmental hazard or threaten the health of the general public.

3. A solid waste management authority may waive the requirements for a Class III site if the owner or operator of that site demonstrates that:

(a) All waste which is placed in the landfill is incidental to his industrial operation;

(b) The landfill is located on property controlled by the operator of the industrial operation; and

(c) The landfill will not receive any hazardous materials and is unlikely to produce pollutants or contaminants that may degrade waters of the State.

4. An owner or operator who applies for a waiver must submit a plan to the solid waste management authority for approval. The plan must include:

(a) A description of the type and estimated amount of material which will be placed in the landfill; and

(b) A program for the maintenance of the site.

5. As used in this section, “hazardous material” has the meaning ascribed to it in [NRS 459.7024](#).

(Added to NAC by Environmental Comm’n, eff. 9-2-92; A 11-9-95)

**NAC 444.733 Application for permit to operate Class III site or lateral expansion thereof.** ([NRS 444.560](#)) An application for a permit to operate a Class III site or a lateral expansion of a Class III site must be submitted to the solid waste management authority. Unless otherwise determined by the solid waste management authority, the application must include:

1. The name, location and mailing address of the:
  - (a) Site;
  - (b) Owner of the site;
  - (c) Operator of the site; and
  - (d) Authorized agent of the owner.
2. Proof of ownership of the land on which the site will be located.
3. The plan to characterize solid waste required by [NAC 444.737](#).
4. The report required by [NAC 444.739](#).
5. The plan for monitoring water required by [NAC 444.741](#).
6. The plan for operating the site required by [NAC 444.684](#).
7. The plan for closing the site which complies with [NAC 444.6895](#).
8. The plan for postclosure of the site which complies with [NAC 444.6896](#).
9. Documentation of financial assurance which complies with [NAC 444.685](#).

(Added to NAC by Environmental Comm’n, eff. 9-2-92; A 11-8-93)

**NAC 444.735 Location.** ([NRS 444.560](#)) The location of a Class III site must:

1. Be easily accessible in all kinds of weather to all vehicles expected to use it.
2. Safeguard against water pollution originating from the decomposed solid waste at the site.
3. Safeguard against uncontrolled movement or collection of gas originating from the decomposed waste at the site.
4. Have an adequate quantity of cover material that is workable, compactible and does not contain organic material of a quantity and distribution conducive to the harboring and breeding of disease vectors.
5. Conform to the land use planning of the area.
6. Not be within one-fourth mile of the nearest inhabited domestic dwelling or place of public gathering or be within 1,000 feet of a public highway, unless special provisions for the beautification of the site and the control of litter vectors are included in the design and approved by the solid waste management authority.
7. Not be within 1,000 feet of any surface water or be within 100 feet of the uppermost aquifer if the site is approved after September 2, 1992, unless approved by the solid waste management authority.
8. Be approved by the solid waste management authority.
9. If the site accepts hazardous waste from conditionally exempt small quantity generators as defined in 40 C.F.R. § 261.5, comply with the provisions of [NAC 444.6785](#) and [444.679](#).

(Added to NAC by Environmental Comm’n, eff. 9-2-92; A by R034-98, 4-17-98)

**NAC 444.737 Plan to characterize solid waste.** ([NRS 444.560](#)) A plan to characterize solid waste for a Class III site must be sufficient to:

1. Determine that the waste is not a hazardous waste;
  2. Identify physical and chemical characteristics of the waste which may create an environmental hazard or threaten the health of the general public; and
  3. Provide for the periodic characterization of the waste stream as needed.
- (Added to NAC by Environmental Comm'n, eff. 9-2-92)

**NAC 444.739 Report for design.** ([NRS 444.560](#)) A report for the design of a Class III site must:

1. Be signed by a professional engineer registered in this State.
  2. Include a general location map showing land use and zoning within 1 mile of the disposal site.
  3. Include a topographic map of the area which must:
    - (a) Be at a scale of not more than 200 feet to the inch, including contour intervals of not more than 5 feet.
    - (b) Indicate the proposed fill areas.
    - (c) Indicate any proposed borrow areas.
    - (d) Indicate access roads.
    - (e) Indicate a typical cross section of a lift.
    - (f) Indicate grades for proper drainage of each lift.
    - (g) Indicate the placement of special devices for drainage and controlling gas, if required.
    - (h) Indicate fencing, equipment for shelter, facilities for employees and all other relevant data to indicate clearly that the landfill will be developed, operated and completed in an orderly manner.
  4. Define anticipated types, quantities and sources of solid wastes to be disposed of at the site.
  5. Demonstrate the design is sufficient to protect the waters of the State from degradation by pollutants or contaminants. The demonstration must consider, without limitation:
    - (a) The hydrogeologic characteristics of the site and surrounding area;
    - (b) The climatic factors of the area; and
    - (c) The volume and physical and chemical characteristics of predicted leachate generation.
  6. Provide proof of compliance with the provisions relating to the runoff and control of surface water set forth in [NAC 444.6885](#) and [444.6887](#).
  7. Define the source, type and quantity of cover material for the site.
- (Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93)

**NAC 444.741 Plan for monitoring water; suspension of monitoring requirements.** ([NRS 444.560](#))

1. A plan for monitoring water for a Class III site must provide for a system capable of monitoring the performance of the design of the site, including the monitoring of the unsaturated zone or groundwater depending on local conditions.
2. The plan must:
  - (a) Identify the location and construction of monitoring points to be used to detect the migration of pollutants or contaminants from the site to the waters of the State;
  - (b) Specify monitoring parameters and the frequency of monitoring those parameters;
  - (c) Specify procedures to ensure quality for all field and laboratory work;
  - (d) Provide for the semiannual submittal of monitoring data to the solid waste management authority;

(e) Define procedures which will be followed if monitoring provides evidence of potential design failure; and

(f) Comply with the provisions of [NAC 444.7481](#) to [444.7499](#), inclusive, if the plan includes the monitoring of groundwater.

3. The solid waste management authority may suspend monitoring requirements if the owner or operator of a Class III site demonstrates that there is no reasonable potential for migration of pollutants or contaminants from the site to waters of the State.

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93)

**NAC 444.743 Final cover or closure; postclosure.** ([NRS 444.560](#)) A Class III site must comply with requirements set forth in [NAC 444.6891](#) to [444.6894](#), inclusive, concerning closure and postclosure.

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A 11-8-93)

**NAC 444.745 Control of erosion and dust.** ([NRS 444.560](#))

1. Suitable grasses must be planted at a Class III site, if required, in completed areas of the landfill to prevent erosion, surface deterioration and fugitive dust.

2. The operator of the site shall ensure that an adequate amount of water is available at all times for the control of dust and the compaction of cover material.

(Added to NAC by Environmental Comm'n, eff. 9-2-92)

**NAC 444.747 Miscellaneous requirements; reports; records; notification.** ([NRS 444.560](#))

1. Scavenging at a Class III site is prohibited.

2. The area of a Class III site must be inspected daily and all scattered paper and other lightweight debris returned to the fill area and covered.

3. The operator of a Class III site shall:

(a) Establish provisions concerning weighing or otherwise adequately measuring and recording all solid waste received at the site; and

(b) Submit annually to the Division a report of the solid waste received at the site. The report must be submitted on a form provided by the Division within 30 days following the end of each calendar year.

4. The operation of a Class III site must be approved by the solid waste management authority.

5. The owner or operator of a Class III site shall record and retain in its operating records at its site or at another location approved by the solid waste management authority:

(a) Any documentation of cost estimates and financial assurance required pursuant to [NAC 444.685](#);

(b) Plans for closure and postclosure care and any monitoring, testing or analytical data required pursuant to [NAC 444.6891](#) to [444.6896](#), inclusive;

(c) How the site conforms to the restrictions on location set forth in [NAC 444.735](#);

(d) Any plan to characterize solid waste required pursuant to [NAC 444.737](#); and

(e) Any demonstration, certification, finding, monitoring, testing or analytical data from the program for monitoring groundwater required pursuant to [NAC 444.7481](#) to [444.7499](#), inclusive.

6. The owner or operator shall promptly notify the solid waste management authority after the owner or operator has placed the information in the operating record of its facility pursuant to subsection 5. The information must be furnished upon request to the solid waste management

authority or be made available for inspection by the solid waste management authority at any reasonable time.

7. Notwithstanding any other provision of this chapter, the solid waste management authority may establish alternative schedules for Class III sites for any recordkeeping and notification required pursuant to [NAC 444.570](#) to [444.7499](#), inclusive, except that the authority will not establish an alternative schedule for the notification required pursuant to subsection 3 of [NAC 444.7491](#).

(Added to NAC by Environmental Comm'n, eff. 9-2-92; A by R034-98, 4-17-98)

#### **Materials Recovery Facilities**

**NAC 444.7474 “Materials recovery facility” defined.** ([NRS 444.560](#)) As used in [NAC 444.7474](#) to [444.74779](#), inclusive, unless the context otherwise requires, “materials recovery facility” means a solid waste management facility that provides for the extraction from solid waste of recyclable materials, materials suitable for use as a fuel or soil amendment, or any combination of those materials. The term does not include:

1. A facility that receives only recyclable materials that have been separated at the source of waste generation if further processing of the materials generates less than 10 percent waste residue by weight on an annual average;

2. A salvage yard for the recovery of used motor vehicle parts;

3. A facility that receives, processes or stores only concrete, masonry waste, asphalt pavement, brick, uncontaminated soil or stone for the recovery of recyclable materials; and

4. A facility that recovers less than 10 percent by weight of the recyclable material from the solid waste received on an annual average.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74743 Approval needed for operation; submission of application before construction begins.** ([NRS 444.560](#))

1. A person shall not operate a materials recovery facility unless the location, design and operating plans of the facility have been approved by the solid waste management authority.

2. An application to operate a materials recovery facility must be submitted to the solid waste management authority before construction of the facility begins.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74747 Application to operate; application to modify.** ([NRS 444.560](#))

1. An application to operate a materials recovery facility must include:

(a) The name, location and mailing address of:

(1) The materials recovery facility;

(2) The owner of the materials recovery facility;

(3) The operator of the materials recovery facility; and

(4) The authorized agent of the owner.

(b) Proof of ownership of the land on which the materials recovery facility will be located.

(c) A report of the design of the materials recovery facility that complies with the provisions of [NAC 444.74751](#).

(d) A plan for operating the materials recovery facility that complies with the provisions of [NAC 444.74755](#).

(e) A plan for the closure of the materials recovery facility that identifies the procedures required to close the facility and describes the manner in which the facility will comply with the provisions for closure set forth in [NAC 444.74771](#). The plan must include a detailed written estimate, in current dollars, of the cost to hire a person to close the materials recovery facility in accordance with the plan.

(f) Proof of financial assurance that complies with the provisions of [NAC 444.74775](#).

(g) A list of the recyclable materials that will be recovered at the materials recovery facility.

(h) A description of the final use, or the available markets, for the materials identified for recovery.

(i) Any other information that the solid waste management authority requires to evaluate the proposed operation of the facility.

2. A materials recovery facility that has been approved by the solid waste management authority may not modify:

(a) The storage or processing capacity of the facility;

(b) The types of waste that a facility may accept; or

(c) The design or method of operation of the facility,

↳ unless the facility obtains the prior approval of the solid waste management authority for those modifications. An application to modify a materials recovery facility must be submitted on a form prescribed by the solid waste management authority.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74751 Report of design.** ([NRS 444.560](#)) The report of the design of the materials recovery facility required by [NAC 444.74747](#) must:

1. Include a detailed description of the site of the facility, a diagram indicating the manner in which the materials are processed at the facility and the design capacity and environmental controls for the facility.

2. Be prepared under the direction of and signed and stamped by a professional engineer who is licensed in this State.

3. Include a general location map that indicates land use and zoning within 1 mile of the materials recovery facility.

4. Include plans and specifications of the materials recovery facility in sufficient detail to demonstrate compliance with the standards for the design of the facility set forth in [NAC 444.74759](#). The plans must:

(a) Be drawn to a scale of not more than 200 feet per inch;

(b) Indicate existing and proposed contours;

(c) Indicate access roads and traffic routes around and within the materials recovery facility;

(d) Include provisions for the control of surface water to minimize the contact of storm water with waste materials and to prevent pollutants or other contaminants from entering the waters of the State;

(e) Indicate fencing, areas for storing equipment, facilities for employees, areas for receiving and handling waste, maintenance areas and any other appurtenances;

(f) Include the maximum processing rate of the facility and the maximum storage capacity, in cubic yards, for processed and unprocessed waste and recovered materials;

(g) Include provisions for controlling odors and dust to prevent a public nuisance;

(h) Define the population and area that will be served by the materials recovery facility; and

(i) List the anticipated types, quantities and sources of solid waste that will be received at the materials recovery facility.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74755 Plan for operating.** ([NRS 444.560](#)) The plan for operating the materials recovery facility required by [NAC 444.74747](#) must provide a detailed description of the proposed operating procedures and include, without limitation:

1. The provisions for controlling access to the materials recovery facility;
2. The number of persons who will be employed at the materials recovery facility during operating hours;
3. A list of the equipment and machinery that will be required to operate the materials recovery facility;
4. The procedures to control vehicular traffic within the materials recovery facility;
5. The types of wastes that the materials recovery facility will not accept and a list of the facilities where such waste will be directed;
6. A program to detect and reject regulated hazardous waste, polychlorinated biphenyl wastes or any other unacceptable wastes identified in the application;
7. The procedures for measuring or weighing solid waste that is accepted by the materials recovery facility;
8. The frequency and method for transferring solid waste to a disposal site;
9. The location of storage areas for processed and unprocessed solid wastes and recovered materials at the materials recovery facility;
10. A plan for the disposal of processed and unprocessed solid wastes and recovered materials;
11. The proposed operating hours of the materials recovery facility;
12. A contingency plan that describes the procedures for emergencies and identifies alternate solid waste management systems;
13. A description of the manner in which the materials recovery facility will comply with the provisions set forth in [NAC 444.74763](#); and
14. The safety procedures and protective equipment required for persons who handle solid waste at the materials recovery facility.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74759 Standards for design.** ([NRS 444.560](#))

1. A materials recovery facility must be constructed with:
  - (a) Barriers and appurtenances necessary to control access to the facility;
  - (b) A road that provides access to the facility in all kinds of weather;
  - (c) Appurtenances to control litter;
  - (d) Provisions that screen the facility from the view of members of the general public;
  - (e) In areas where putrescible wastes will be received, processed or stored, a covered enclosure with at least three sides, and a floor with a durable surface that contains drainage controls to control runoff and prevent runoff or the accumulation of standing water; and
  - (f) In areas where solid wastes from the construction, refurbishment or demolition of buildings or other structures will be received, processed or stored, a floor with a durable surface that contains drainage controls to control runoff and prevent runoff or the accumulation of standing water.
2. A materials recovery facility that is open to the public must comply with the provisions relating to signs set forth in [NAC 444.690](#).

3. The design and location of a materials recovery facility must comply with applicable local ordinances.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74763 Transfer, removal, recovery and storage of solid waste. ([NRS 444.560](#))**

1. Solid waste that is accepted by a materials recovery facility must be:

(a) Transferred to a disposal site that has been issued a permit by the solid waste management authority; or

(b) Recovered for reuse or recycling.

2. Unless the owner or operator is unable to do so because of an emergency, putrescible solid waste or solid waste that is mixed with putrescible solid waste must be removed from a materials recovery facility not more than 72 hours after acceptance by the facility.

3. Nonputrescible solid waste may not be stored at the materials recovery facility for more than 1 week. Not more than 3,000 cubic yards of solid waste may be stored at the facility at one time, unless otherwise approved by the solid waste management authority.

4. Recovered materials may not be stored at the facility for more than 1 year. At least 75 percent of the materials recovered at the facility must be sold and removed from the facility in a 12-month period. Any recovered materials stored for more than 1 year must be considered waste and properly disposed of at a disposal site that has been issued a permit by the solid waste management authority or a facility approved by the solid waste management authority.

5. Solid waste or recovered materials may not be stored in piles which are more than 15 feet in height or have an area at the base which is more than 5,000 square feet. A distance of at least 12 feet must be maintained between adjacent piles of material and at least 10 feet between any pile of materials and the boundary of the facility.

6. The acceptance, handling and transportation of asbestos must be conducted in the manner prescribed by [NAC 444.965](#) to [444.976](#), inclusive.

7. The owner or operator of a materials recovery facility shall:

(a) Inspect the area of the facility daily and collect, and properly dispose of, all scattered paper and lightweight debris; and

(b) Comply, in accordance with the provisions of [NAC 444.660](#), with any local ordinances concerning the storage, collection or transportation of solid waste.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74767 Maintenance, availability and content of records; classification of certain information as trade secret; reporting of recycled materials. ([NRS 444.560](#))**

1. The operator of a materials recovery facility shall maintain accurate operating records at the facility. The records must be furnished upon request to the solid waste management authority or made available for inspection by the solid waste management authority during the regular business hours of the facility. The records must include:

(a) A daily record of:

(1) The quantity of solid waste received at the facility.

(2) The quantity of solid waste transported to disposal sites and the name and location of each such disposal site.

(3) The quantity of recovered materials removed from the facility and the name and location of each facility that receives the recovered materials.

(b) The receipt or rejection of prohibited wastes.

(c) Any emergencies or unusual events.

2. The operator of the facility may request that certain information included in the records be classified as a trade secret. If the solid waste management authority determines that such information is a trade secret, it shall not disclose that information unless ordered to do so pursuant to a court order.

3. The owner or operator of a materials recovery facility shall comply with the requirements of [NAC 444A.135](#) concerning the reporting of recycled material.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74771 Closure of facility. ([NRS 444.560](#))**

1. The owner or operator of a materials recovery facility shall notify the solid waste management authority in writing at least 90 days before the date the facility is expected to close. The facility may not accept any solid waste after the expected closing date.

2. The owner or operator shall, within 30 days after receiving the final shipment of solid waste, remove all remaining solid waste, litter, recovered materials and inoperable equipment in accordance with the plan for closure of the facility required by [NAC 444.74747](#), except that all putrescible waste must be removed within 72 hours after receipt.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74775 Surety bond or other financial assurance required to cover cost of closure. ([NRS 444.560](#))**

1. The owner or operator of a materials recovery facility shall obtain a surety bond, or any other mechanism of financial assurance approved by the solid waste management authority, to cover the cost to close the facility, including the removal and proper disposal of the maximum inventory of waste and recovered materials for which the facility is designed. The owner or operator shall provide financial assurance for the closure of the facility until the facility is closed and the closure has been approved by the solid waste management authority.

2. The surety bond must be issued by a corporation licensed to do business in this State and include an indemnity agreement that guarantees payment to a trust fund or to the solid waste management authority.

3. If payment is guaranteed to a trust fund, the trustee of the trust fund must be an entity which is authorized to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

4. The owner or operator of the materials recovery facility or any other person who is authorized to conduct activities for the closure of the facility may request reimbursement from the trustee for any cost incurred to close the facility. The trustee may provide reimbursement for that cost only if there is sufficient money in the trust fund to pay the remaining costs to close the facility, and proof and justification of the cost is placed in the operating records of the facility. The owner or operator shall notify the solid waste management authority that the proof and justification for the reimbursement of the cost was placed in the operating records of the facility and that he has received the reimbursement.

5. The owner or operator of the facility shall review annually the estimate of the cost to close the facility upon which the bond or other mechanism of financial assurance is based and submit the estimate to the solid waste management authority for its review and approval.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

**NAC 444.74779 Compliance with plans for design and operation; suspension or revocation of approval to operate. ([NRS 444.560](#))**

1. A materials recovery facility must comply with the plans for the design and operation of the facility approved by the solid waste management authority. A materials recovery facility must not:

- (a) Contribute to the pollution of the air or waters of the State;
- (b) Cause an impairment of the environment;
- (c) Cause a health or safety hazard to employees of the facility or the general public; or
- (d) Cause a public nuisance.

2. The solid waste management authority may suspend or revoke its approval to operate a materials recovery facility if the owner or operator of the facility fails to comply with the provisions of [NAC 444.7474](#) to [444.74779](#), inclusive.

(Added to NAC by Environmental Comm'n by R173-99, eff. 2-9-2000)

#### **Appeals and Requests for Variance**

##### **NAC 444.748 Petition for variance; appeals. ([NRS 444.560](#))**

1. Any person who believes that an alternative to any standard specified in [NAC 444.570](#) to [444.7499](#), inclusive, will comply with the intent of the specified standard and will protect public health and the environment, may petition the State Environmental Commission for a variance in accordance with its procedural rules. A variance may not be granted if it is inconsistent with the federal criteria for landfills set forth in 40 C.F.R. Part 258, as that part existed on November 8, 1993.

2. Any person who wishes to appeal from a decision or action of the solid waste management authority may do so. Such an appeal must be made in writing in accordance with the State Environmental Commission's procedural rules.

[Environmental Comm'n, Solid Waste Mgt Reg. §§ 6.1 & 6.2, eff. 9-21-77]—(NAC A 11-8-93; 3-1-94)

#### **Groundwater Monitoring and Corrective Action**

##### **NAC 444.7481 Suspension and continuation of monitoring requirements. ([NRS 444.560](#))**

1. The requirements for monitoring groundwater set forth in [NAC 444.7483](#) to [444.7492](#), inclusive, may be suspended by a solid waste management authority for a municipal solid waste landfill unit if the owner or operator can demonstrate that there is no potential for migration of hazardous constituents from that unit to the uppermost aquifer during the active life of the unit, including the period of closure and postclosure. The demonstration must be certified by a qualified ground-water scientist and approved by the solid waste management authority. The demonstration must be based upon:

(a) Measurements collected at specific field sites and the sampling and analysis of physical, chemical and biological processes affecting the fate and transportation of contaminants; and

(b) Predictions of the fate and transportation of contaminants which are based on the maximum possible rate of the migration of the contaminants and a consideration of the impacts on public health and safety and the environment.

2. Once monitoring of groundwater begins at a municipal solid waste landfill unit, the owner or operator of the unit shall continue to monitor the groundwater throughout the active life of the unit, including the period of closure and postclosure, as specified in [NAC 444.6894](#).

(Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94; 11-9-95; 11-9-95)

**NAC 444.7482 Alternative schedule for complying with monitoring requirements. ([NRS 444.560](#))**

1. A solid waste management authority may establish an alternative schedule for the owners or operators of existing municipal solid waste landfill units or lateral expansions within the area of its jurisdiction to comply with [NAC 444.7483](#) to [444.7499](#), inclusive. The schedule must ensure that at least 50 percent of all existing municipal solid waste landfill units within the area of its jurisdiction are in compliance by October 9, 1994, and all existing municipal solid waste landfill units within the area of its jurisdiction are in compliance by October 9, 1996. In establishing the schedule for compliance, the solid waste management authority shall consider potential risks posed by the units or lateral expansions to public health and safety and the environment, including the:

- (a) Proximity of persons and environmental conditions that may be affected by those risks;
- (b) Design of the municipal solid waste landfill unit;
- (c) Age of the municipal solid waste landfill unit;
- (d) Size of the municipal solid waste landfill unit;
- (e) Types and quantities of wastes disposed of at the unit, including sewage sludge; and
- (f) Resource value of the underlying aquifer, including:
  - (1) Its current and future uses;
  - (2) Its proximity and rate of withdrawal of users; and
  - (3) The quality and quantity of groundwater.

2. The solid waste management authority may establish alternative schedules for demonstrating compliance with:

- (a) The provisions of [NAC 444.7483](#) that require notification of the placement of the certification in the operating plan;
  - (b) The provisions of [NAC 444.7489](#) relating to:
    - (1) Notification and the placement of the notice in the operating record of any statistically significant increase in levels of constituents listed in Appendix I; and
    - (2) The program for assessment monitoring;
  - (c) The provisions of [NAC 444.749](#) relating to:
    - (1) The sampling and analyzing of constituents listed in Appendix II;
    - (2) Placement in the operating record of the notice that constituents listed in Appendix II have been detected and notification of that notice; and
    - (3) Sampling for constituents listed in Appendix I or II;
  - (d) The provisions of [NAC 444.7491](#) relating to notification and the placement of the notice in the operating record of any statistically significant increase above the standard for the protection of groundwater;
  - (e) The provisions of [NAC 444.7491](#) and [444.7493](#) relating to the assessment of corrective measures;
  - (f) The provisions of [NAC 444.7494](#) relating to the selection of a remedy and notification of the placement of documents relating to the selection in the operating record; and
  - (g) The provisions of [NAC 444.7498](#) and [444.7499](#) relating to the notification of the placement in the operating record of:
    - (1) Alternative measures of corrective action; and
    - (2) Certification of the completion of the remedy.
- (Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7483 Requirements concerning system for monitoring groundwater. ([NRS 444.560](#))**

1. The owner or operator of a municipal solid waste landfill unit shall install a system for monitoring groundwater which consists of a sufficient number of wells, installed at appropriate locations and depths, to yield samples of groundwater from the uppermost aquifer which:

(a) Represent the quality of background groundwater which has not been affected by leakage from the unit. A determination of background quality may include the sampling of wells that are not hydraulically upgradient of the waste management area if:

(1) Hydrogeologic conditions do not allow the owner or operator to determine which wells are hydraulically upgradient; or

(2) Sampling at other wells will provide an indication of the quality of the background groundwater which is as representative or more representative than that provided by the upgradient wells.

(b) Represent the quality of groundwater at the boundary of the waste management unit.

↪ The monitoring system must be installed to ensure detection of contaminants in the groundwater in the uppermost aquifer. When physical obstacles preclude installation of wells to monitor groundwater at the boundary of the waste management unit, a downgradient monitoring system may be installed at the closest practicable distance hydraulically downgradient from the boundary which ensures detection of contamination of groundwater in the uppermost aquifer.

2. If a disposal site has more than one municipal solid waste management landfill unit, the solid waste management authority may approve a system for monitoring groundwater with multiple units instead of separate systems for each municipal solid waste landfill unit, if the system complies with the requirements of subsection 1 and is as protective of public health and safety and the environment as the separate systems. To approve a system with multiple units, the solid waste management authority shall consider the:

(a) Number, spacing and orientation of the municipal solid waste landfill units;

(b) Hydrogeologic setting;

(c) History of the disposal site;

(d) Engineering design of the municipal solid waste landfill units; and

(e) Type of waste accepted at the municipal solid waste landfill units.

3. Monitoring wells must be cased in a manner which maintains the integrity of the bore hole of the monitoring well. The casing must be screened or perforated and packed with gravel or sand, if necessary, to enable the collection of samples of groundwater. The annular space above the sampling depth must be sealed to prevent contamination of samples and the groundwater.

4. The owner or operator shall notify the solid waste management authority that documentation concerning the design, installation, development and decommission of any monitoring wells, piezometers and other measurement, sampling and analytical devices has been placed in the records of the site. The monitoring wells, piezometers and other measurement, sampling and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

5. The number, spacing and depths of the monitoring systems must be:

(a) Determined based upon technical information for each specific site, including a thorough characterization of the:

(1) Thickness of the aquifer and the rate and direction of the flow of groundwater, including seasonal and temporal fluctuations; and

(2) Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, without limitation, the thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities of these materials; and

(b) Certified by a qualified ground-water scientist and approved by the solid waste management authority. Within 14 days after receiving certification and approval, the owner or operator shall place the certification in the records for the site.

6. As used in this section:

(a) "Annular space" means the space between the bore hole and well casing.

(b) "Boundary of the waste management unit" means a vertical surface located at the hydraulically downgradient limit of the unit that extends down in the uppermost aquifer.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7484 Program for sampling and analysis. ([NRS 444.560](#))**

1. The owner or operator shall notify the solid waste management authority that the documentation of the program for sampling and analysis has been placed in the records of the disposal site.

2. A system for monitoring groundwater must include:

(a) Consistent sampling and analytical procedures designed to ensure monitoring results which provide an accurate representation of the quality of the background and downgradient groundwater at the monitoring wells installed in compliance with [NAC 444.7483](#).

(b) Procedures and techniques for:

(1) The collection, preservation and shipment of samples;

(2) Analyzing samples;

(3) The control of the chain of custody; and

(4) Quality assurance and quality control.

(c) Methods for sampling and analysis which are appropriate for sampling groundwater and which accurately measure hazardous constituents and other monitoring parameters in samples of groundwater. Samples of groundwater must not be filtered in the field before they are analyzed in the laboratory.

3. The sampling procedures and frequency must be protective of public health and safety and the environment.

4. Each time groundwater is sampled, the elevations of groundwater must be measured in each well immediately before purging and the owner or operator shall determine the rate and direction of the flow of groundwater. The elevations of groundwater in wells which monitor the same disposal site must be measured within a period that is short enough to avoid temporal variations in the flow of groundwater which could preclude an accurate determination of the rate of flow and direction of groundwater.

5. The owner or operator shall determine the quality of the background groundwater in a hydraulically upgradient or background well for each of the monitoring parameters or constituents required by the system for monitoring groundwater which applies to the municipal solid waste landfill unit, as determined pursuant to [NAC 444.7487](#) or [444.749](#). The quality of the background groundwater may be determined at wells that are not located hydraulically upgradient from the municipal solid waste landfill unit if the monitoring system meets the requirements of [NAC 444.7483](#).

6. The number of samples collected to establish data concerning the quality of groundwater must be consistent with the appropriate statistical procedures set forth in [NAC 444.7485](#). The sampling procedures used must be those specified by [NAC 444.7488](#) for detection monitoring, [NAC 444.749](#) for assessment monitoring and [NAC 444.7493](#) for corrective action.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7485 Statistical methods for evaluating data; performance standards. ([NRS 444.560](#))**

1. An owner or operator shall specify in the records for the disposal site one of the following statistical methods to be used in evaluating data from monitoring groundwater for each hazardous constituent:

(a) A parametric analysis of variance followed by procedures for multiple comparisons to identify statistically significant evidence of contamination. This method must include an estimation and testing of the contrasts between the mean for each compliance well and the background mean levels for each constituent.

(b) An analysis of variance based on ranks followed by procedures for multiple comparisons to identify statistically significant evidence of contamination. This method must include an estimation and testing of the contrasts between the median for each compliance well and the background median levels for each constituent.

(c) A procedure using tolerance or predictional intervals whereby an interval for each constituent is established from the distribution of the background data and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(d) A procedure using a control chart which gives limits of control for each constituent.

(e) Any other statistical method which meets the performance standards set forth in subsection 3. The owner or operator shall place a written justification for using the statistical method in the operating records for the disposal site and notify the solid waste management authority of the use of this alternative method. The justification must demonstrate that the alternative method meets the performance standards set forth in subsection 3.

2. The statistical method chosen pursuant to this section must be conducted separately for each hazardous constituent in each well.

3. Any statistical method chosen pursuant to this section must comply with the following performance standards, as appropriate:

(a) The statistical method used to evaluate data from monitoring groundwater must be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data must be transformed or a theory test that does not use data from the distribution of chemical parameters or hazardous constituents must be used. If the distributions for the constituents differ, more than one statistical method may be used, if needed.

(b) If a procedure which compares individual wells is used to compare the concentration of constituents for an individual compliance well with background concentrations of constituents or a standard for the protection of groundwater, the test must be done at a Type I error level that is no less than 0.01 for each testing period. If a procedure using multiple comparisons is used, the Type I error level for each testing period must be no less than 0.05, and the Type I error level of no less than 0.01 for comparisons of individual wells must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals or control charts.

(c) If a control chart is used to evaluate data, the control chart and its associated values for its parameters must be protective of public health and safety and the environment. The parameters must be determined after considering the number of samples in the background database, the distribution of data and the range of the concentration values for each constituent.

(d) If a tolerance interval or a predictional interval is used to evaluate data from monitoring groundwater, the levels of confidence and, for tolerance intervals, the percentage of the population of samples which the interval must contain, must be protective of public health and safety and the environment. These parameters must be determined after considering the number of samples in the background database, the data distribution and the range of the concentration values for each constituent of concern.

(e) The statistical method must account for data below the limit of detection with one or more statistical procedures which are protective of public health and safety and the environment. Any practical quantitation limit which is used in the statistical method must be the lowest concentration level which can be reliably achieved within specified limits of precision and accuracy during routine conditions for the operation of a laboratory which are available to the disposal site.

(f) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability and temporal correlation in the data.

4. As used in this section, "Type I error" means an error which occurs when a true null hypothesis is rejected erroneously and, as a result, a test for the monitoring of groundwater incorrectly indicates contamination or an increase in contamination at a regulated unit.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7486 Determination of statistically significant increase over background values. (NRS 444.560)**

1. Within 14 days after completing sampling and analysis, the owner or operator shall determine whether there is a statistically significant increase over background values for each parameter or constituent at each monitoring well required in the system for monitoring groundwater which applies to the municipal solid waste landfill unit, as determined pursuant to [NAC 444.7487](#) or [444.749](#).

2. In determining whether a statistically significant increase has occurred, the owner or operator shall compare the quality of the groundwater of each parameter or constituent at each monitoring well designated pursuant to [NAC 444.7483](#) to the background value of that constituent, according to the statistical procedures and performance standards set forth in [NAC 444.7485](#).

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7487 Constituents required to be monitored; establishment of list of alternative parameters for inorganic materials. (NRS 444.560)**

1. An owner or operator shall monitor constituents at all wells monitoring groundwater pursuant to [NAC 444.7483](#). At a minimum, the constituents listed in Appendix I must be monitored.

2. The solid waste management authority may delete any of the parameters for monitoring constituents listed in Appendix I for a municipal solid waste landfill unit if it is shown that the deleted constituents are not reasonably expected to be contained in or derived from the waste contained in the unit.

3. The solid waste management authority may establish a list of alternative parameters for inorganic materials for a municipal solid waste landfill unit, in lieu of any of the following:

- (a) Antimony;
- (b) Arsenic;
- (c) Barium;
- (d) Beryllium;
- (e) Cadmium;
- (f) Chromium;
- (g) Cobalt;
- (h) Copper;
- (i) Lead;
- (j) Nickel;
- (k) Selenium;
- (l) Silver;
- (m) Thallium;
- (n) Vanadium; and
- (o) Zinc,

↳ if the alternative parameters provide a reliable indication of releases of inorganic materials from the municipal solid waste landfill unit into the groundwater.

4. In establishing alternative parameters, the solid waste management authority shall consider:

- (a) The types, quantities and concentrations of constituents in waste managed at the municipal solid waste landfill unit;
- (b) The mobility, stability and persistence of constituents or their reaction products in the unsaturated zone beneath the municipal solid waste landfill unit;
- (c) The detectability of indicator parameters, constituents and reaction products in the groundwater; and
- (d) The concentration or values and coefficients of variation of monitoring parameters or constituents in the groundwater background.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7488 Program for detection monitoring. ([NRS 444.560](#))**

1. Except as otherwise provided in subsection 2, all constituents listed in Appendix I or in the list of alternative parameters established pursuant to [NAC 444.7487](#) must be monitored at least semiannually during the active life of a municipal solid waste landfill unit, including the period of closure and postclosure. At least four independent samples from each background and downgradient well must be collected and analyzed for the constituents during the first semiannual sampling. At least one sample from each background and downgradient well must be collected and analyzed during subsequent semiannual sampling.

2. The solid waste management authority may specify an appropriate alternative schedule for monitoring constituents listed in Appendix I or the list of alternative parameters. The alternative schedule may require monitoring not less than annually. The alternative schedule must be based on the:

- (a) Lithology of the aquifer and unsaturated zone;
- (b) Hydraulic conductivity of the aquifer and unsaturated zone;
- (c) Rate of flow of groundwater;

(d) Minimum distance between the upgradient edge of the municipal solid waste landfill unit and downgradient monitoring well screen; and

(e) Resource value of the aquifer.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7489 Procedures upon determination of statistically significant increase of Appendix I constituents or alternative parameters. ([NRS 444.560](#))**

1. If an owner or operator determines, pursuant to [NAC 444.7485](#), that there is a statistically significant increase over background for one or more of the constituents listed in Appendix I or the list of alternative parameters established pursuant to [NAC 444.7487](#), at any monitoring well at the boundary specified by [NAC 444.7483](#), the owner or operator shall:

(a) Within 14 days after making this determination, place a notice in the records of the disposal site indicating which constituents have shown statistically significant increases and notify the solid waste management authority that this notice was placed in the operating records; and

(b) Except as otherwise provided in subsection 2, establish a program for assessment monitoring pursuant to [NAC 444.749](#) and [444.7491](#) within 90 days after making the determination.

2. The owner or operator may demonstrate that a source other than a municipal solid waste landfill unit caused the contamination or that the statistically significant increase resulted from an error in sampling, analysis or statistical evaluation or from a natural variation in the quality of groundwater. A report documenting this demonstration must be certified by a qualified groundwater scientist, approved by the solid waste management authority and placed in the operating records of the disposal site. If a successful demonstration is made and approved, the owner or operator may continue monitoring constituents as specified in this section and [NAC 444.7487](#) and [444.7488](#). If, after 90 days, a successful demonstration is not made, the owner or operator shall initiate a program for assessment monitoring pursuant to [NAC 444.749](#) and [444.7491](#).

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.749 Program for assessment monitoring. ([NRS 444.560](#))**

1. If a statistically significant increase over background has been detected for one or more of the constituents listed in Appendix I or the list of alternative parameters established pursuant to [NAC 444.7487](#), an owner or operator shall establish a program for assessment monitoring.

2. Except as otherwise provided in subsection 3, within 90 days after initiating a program for assessment monitoring, and annually thereafter, the owner or operator shall sample and analyze the groundwater for all constituents identified in Appendix II. At least one sample from each downgradient well must be collected and analyzed during each sampling. For any constituent detected in the downgradient wells as a result of this analysis, at least four independent samples from each background and downgradient well must be collected and analyzed to establish background for the constituents. The solid waste management authority may specify an appropriate subset of wells to be sampled and analyzed for constituents listed in Appendix II during assessment monitoring. The solid waste management authority may delete any of the parameters for monitoring constituents listed in Appendix II for a municipal solid waste landfill unit if it is shown that the deleted constituents are not reasonably expected to be in or derived from the waste contained in the unit.

3. The solid waste management authority may specify an appropriate alternative schedule for monitoring all constituents listed in Appendix II. The alternative schedule must be based on the:

- (a) Lithology of the aquifer and unsaturated zone;
- (b) Hydraulic conductivity of the aquifer and unsaturated zone;
- (c) Rate of flow of groundwater;
- (d) Minimum distance between the upgradient edge of the municipal solid waste landfill unit and downgradient monitoring well screen;
- (e) Resource value of the aquifer; and
- (f) Nature, fate and transportation of any constituents detected in accordance with this section.

4. After obtaining the results from the initial or subsequent samplings pursuant to subsection 2 or 3, the owner or operator shall:

(a) Within 14 days, place a notice in the operating records of the disposal site identifying the constituents listed in Appendix II which have been detected and submit the sampling results to the solid waste management authority.

(b) Within 90 days, and on at least a semiannual basis thereafter:

(1) Resample all wells specified by [NAC 444.7483](#);

(2) Conduct analyses for all constituents listed in Appendix I or the list of alternative parameters established pursuant to [NAC 444.7487](#), and for those constituents in Appendix II which are detected as a result of sampling pursuant to subsection 2 or 3; and

(3) Record their concentrations in the operating records for the disposal site.

↪ At least one sample from each background and downgradient well must be collected and analyzed during the samplings. The solid waste management authority may specify an alternative schedule for monitoring the constituents referred to in this section. The alternative schedule for constituents listed in Appendix I or the list of alternative parameters established pursuant to [NAC 444.7487](#) may not require monitoring not less than annually. The alternative schedule must be based on the factors specified in subsection 3.

(c) Establish background concentrations for any constituents detected pursuant to paragraph (b) or subsection 2 or 3.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7491 Procedures upon determination of concentrations of Appendix II constituents. ([NRS 444.560](#))**

1. If the concentrations of all constituents listed in Appendix II are shown to be at or below background values, using the statistical procedures set forth in [NAC 444.7485](#), for two consecutive samplings, the owner or operator shall notify the solid waste management authority of this finding and may return to the monitoring procedures set forth in [NAC 444.7488](#).

2. If the concentrations of any constituents listed in Appendix II are above background values, but all concentrations are below the standard for the protection of groundwater established pursuant to [NAC 444.7492](#), using the statistical procedures in [NAC 444.7485](#), the owner or operator shall continue monitoring in accordance with this section.

3. Except as otherwise provided in subsection 4, if one or more constituents listed in Appendix II are detected at statistically significant levels above the standard for the protection of groundwater in any sampling, the owner or operator shall:

(a) Within 14 days of this finding, place a notice in the operating records for the disposal site identifying the constituents which have exceeded the standard and notify the solid waste management authority and all appropriate local government officials that the notice has been placed in the operating records;

(b) Characterize the nature and extent of the release by installing additional monitoring wells as necessary;

(c) Install at least one additional monitoring well at the boundary of the municipal solid waste landfill unit in the direction of the migration of the contaminant and sample this well in accordance with [NAC 444.749](#);

(d) Notify all persons who own or reside on the land which directly overlies any part of the plume of contamination if contaminants have migrated off the site as indicated by the sampling of wells in accordance with this section; and

(e) Initiate an assessment of corrective measures pursuant to [NAC 444.7493](#).

4. In lieu of complying with the provisions of subsection 3, the owner or operator may demonstrate that a source other than a municipal solid waste landfill unit caused the contamination or that the statistically significant increase resulted from error in sampling, analysis or statistical evaluation or from a natural variation in the quality of the groundwater. A report documenting this demonstration must be certified by a qualified ground-water scientist, approved by the solid waste management authority and placed in the operating records of the unit. If a successful demonstration is made, the owner or operator shall continue monitoring in accordance with the program for assessment pursuant to this section, and may return to detection monitoring if the constituents are at or below background in accordance with subsection 1. Until a successful demonstration is made, the owner or operator shall comply with the provisions of subsection 3.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7492 Establishment of standard for protection of groundwater. ([NRS 444.560](#))**

1. The Administrator shall establish a standard for the protection of groundwater for each constituent listed in Appendix II detected in the groundwater as follows:

(a) For a constituent for which a maximum contaminant level has been set forth pursuant to the Safe Drinking Water Act (42 U.S.C. §§ 300f et seq.), and 40 C.F.R. Part 141, as those sections existed on November 8, 1993, the maximum contaminant level for that constituent.

(b) For a constituent for which a maximum contaminant level has not been adopted, a level equal to:

(1) The background concentration of the constituent; or

(2) An appropriate level that is based on the protection of public health and safety and complies with the following requirements:

(I) The level must be established in compliance with state and federal guidelines for assessing the health risks of environmental pollutants;

(II) The level must be based on scientific studies conducted in accordance with the Toxic Substances Control Act Good Laboratory Practice Standards, 40 C.F.R. Part 792, as those standards exist on March 1, 1994, or equivalent studies;

(III) For carcinogens, the level must represent a concentration of the constituent that is associated with an excess risk of cancer caused by a continuous lifetime exposure which is within a range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$ , inclusive; and

(IV) For systemic toxicants, the level must represent a concentration to which a human being could be exposed on a daily basis without an appreciable risk of deleterious effects during the course of his lifetime. As used in this sub-subparagraph, "systemic toxicant" includes toxic chemicals that cause deleterious effects other than cancer or a mutation.

(c) For a constituent for which the background level is higher than the maximum contaminant level set forth in paragraph (a) of this subsection, the background concentration of the constituent.

2. In establishing standards pursuant to paragraph (b) of subsection 1, the Administrator may consider:

- (a) Multiple contaminants in the groundwater;
  - (b) Potential threats to sensitive areas of the environment; and
  - (c) Other threats specific to that site or potential threats to groundwater.
- (Added to NAC by Environmental Comm'n, eff. 11-8-93; A 3-1-94)

**NAC 444.7493 Assessment of corrective measures upon determination that level of any Appendix II constituent exceeds standard for protection of groundwater; public notice and comment. (NRS 444.560)**

1. Within 90 days after finding that any of the constituents listed in Appendix II have been detected at a statistically significant level exceeding the standards for the protection of groundwater established pursuant to [NAC 444.7492](#), the owner or operator shall initiate an assessment of corrective measures. Such an assessment must be completed within a reasonable period specified by the solid waste management authority and submitted for review and approval by the solid waste management authority.

2. The owner or operator shall continue monitoring in accordance with [NAC 444.749](#) and [444.7491](#) until the solid waste management authority approves the assessment of corrective measures.

3. The assessment must include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy in accordance with [NAC 444.7494](#), [444.7495](#) and [444.7496](#), including, but not limited to:

(a) The performance, reliability, ease of implementation and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts and the control of exposure to any residual contamination;

(b) The time required to begin and complete the remedy;

(c) The costs of carrying out the remedy; and

(d) Any state or local statutory or regulatory requirements or other environmental or public health and safety requirements which may substantially affect the implementation of the remedy.

4. The solid waste management authority shall issue a public notice and accept public comment for 30 days before the selection of a remedy. If requested during the period of public comment, a public hearing must be held to discuss the assessment of corrective measures.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7494 Selection and approval of remedy by solid waste management authority. (NRS 444.560)**

1. Based on the results of the assessment of corrective measures conducted pursuant to [NAC 444.7493](#) and the public comments received, if any, the solid waste management authority may approve a remedy which:

(a) Is protective of public health and safety and the environment;

(b) Complies with the standard for the protection of groundwater established pursuant to [NAC 444.7492](#);

(c) Controls the sources of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of constituents listed in Appendix II which may pose a threat to the public health and safety or the environment; and

(d) Complies with standards for the management of wastes as specified in subsection 3 of [NAC 444.7498](#).

2. In selecting a remedy, the solid waste management authority shall consider:

(a) The long-term and short-term effectiveness and protectiveness of a potential remedy, and the degree of certainty that the remedy will prove successful, based on the:

- (1) Magnitude of reducing existing risks;
- (2) Magnitude of residual risks and the likelihood of further releases caused by waste remaining after the implementation of a potential remedy;
- (3) Type and degree of long-term management required, including monitoring, operation and maintenance;
- (4) Short-term risks which might be posed to the community, workers or the environment during implementation of a potential remedy, including potential threats to public health and safety and the environment associated with the excavation, transportation, and redisposal or containment of the constituent;
- (5) Time until full protection is achieved;
- (6) Potential for exposure of persons and environmental conditions to remaining wastes, considering the potential threat to public health and safety and the environment associated with the excavation, transportation, redisposal or containment;
- (7) Long-term reliability of the engineering and institutional controls; and
- (8) Potential need for the replacement of the remedy.

(b) The effectiveness of the remedy in controlling the source to reduce further releases based on the extent to which:

- (1) Practices for containment will reduce further releases; and
- (2) Technologies for treatment may be used.

(c) The ease or difficulty of carrying out a potential remedy based on the consideration of the following factors:

- (1) The degree of difficulty associated with constructing the technology;
- (2) The expected operational reliability of the technologies;
- (3) The need to coordinate with and obtain necessary approvals and permits from other agencies;
- (4) The availability of necessary equipment and specialists; and
- (5) The available capacity and location of needed treatment, storage and disposal services.

(d) The practicable capability of the owner or operator to carry out the remedy, including a consideration of his technical and economic capability.

(e) The degree to which concerns of the community are addressed by the potential remedy.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7495 Schedule for initiation and completion of remedial activities.** ([NRS 444.560](#)) An owner or operator shall submit to the solid waste management authority a schedule for initiating and completing remedial activities. The schedule must require the initiation of remedial activities within a reasonable period and must be approved by the solid waste management authority. In proposing the schedule, the owner or operator shall consider:

1. The extent and nature of contamination;
2. The practical capabilities of remedial technologies in achieving compliance with standards for the protection of groundwater established pursuant to [NAC 444.7492](#) and other objectives of the remedy;
3. The availability of systems for the treatment or disposal of wastes managed during the implementation of the remedy;

4. The desirability of utilizing technologies which are experimental or not widely available, but which may offer significant advantages over readily available technologies in terms of effectiveness, reliability, safety or ability to achieve remedial objectives;

5. The potential risks to public health and safety and the environment from exposure to contamination before the completion of the remedy;

6. The resource value of the aquifer, including:

(a) The current and future uses;

(b) The proximity and rate of withdrawal of users;

(c) The quantity and quality of groundwater;

(d) The potential damage to wildlife, crops, vegetation and physical structures caused by exposure to a constituent;

(e) The hydrogeologic characteristics of the disposal site and surrounding land;

(f) The cost of removing and treating groundwater; and

(g) The cost and availability of alternative water supplies;

7. The practicable capability of the owner or operator to carry out the remedial activities; and

8. Any other relevant factors.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7496 Exemptions from requirement of remediation. ([NRS 444.560](#))**

1. The solid waste management authority and the Administrator may jointly determine that remediation of a release of a constituent listed in Appendix II from a municipal solid waste landfill unit is not necessary if the owner or operator demonstrates to the solid waste management authority and the Administrator that:

(a) The groundwater is additionally contaminated by substances that have originated from a source other than a municipal solid waste landfill unit and those substances are present in such concentrations that the clean up of the release from the municipal solid waste landfill unit would provide no significant reduction in risk to persons or environmental conditions that are or may be affected by the release;

(b) The constituents are present in groundwater which:

(1) Is not currently or reasonably expected to be a source of drinking water; and

(2) Is not hydraulically connected with waters to which the constituents are migrating or are likely to migrate in concentrations which would exceed the standards for the protection of groundwater established pursuant to [NAC 444.7492](#);

(c) Remediation of the releases is technically impracticable; or

(d) Remediation would result in unacceptable cross-media impacts.

2. The provisions of subsection 1 do not affect the authority of the Administrator or solid waste management authority to require the owner or operator to undertake measures to control the source of the constituent or any other measures which may be necessary to:

(a) Eliminate or minimize further releases to the groundwater;

(b) Prevent exposure of the groundwater to constituents; or

(c) Remediate the groundwater to concentrations which are technically practicable and significantly reduce threats to public health and safety and the environment.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7497 Program for monitoring corrective action; performance of remedial activities; interim measures to protect public. ([NRS 444.560](#))** Based on the schedule

established pursuant to [NAC 444.7495](#) for the initiation and completion of remedial activities, the owner or operator shall:

1. Establish and carry out a program for monitoring the corrective action for the groundwater which:

(a) At a minimum, meets the requirements for monitoring set forth in [NAC 444.749](#) and [444.7491](#);

(b) Indicates the effectiveness of the remedy; and

(c) Demonstrates compliance with the standard for the protection of groundwater in accordance with paragraph (b) of subsection 1 of [NAC 444.7499](#);

2. Carry out the remedy selected pursuant to [NAC 444.7494](#), [444.7495](#) and [444.7496](#); and

3. Take any interim measures necessary to ensure the protection of public health and safety and the environment. Interim measures must, to the greatest extent practicable, be consistent with the objectives, and contribute to the performance, of any remedy which may be required pursuant to [NAC 444.7494](#), [444.7495](#) and [444.7496](#). In determining whether interim measures are necessary, the owner or operator shall consider:

(a) The time required to develop and carry out a final remedy;

(b) The actual or potential exposure of nearby populations or environmental conditions to hazardous constituents;

(c) The actual or potential contamination of supplies for drinking water or sensitive ecosystems;

(d) The further degradation of the groundwater which may occur if remedial action is not initiated expeditiously;

(e) Weather conditions which may cause hazardous constituents to migrate or be released;

(f) The risk of fire or explosion, or the potential for exposure to hazardous constituents as a result of an accident or failure of a container or handling system; and

(g) Any other situations which may pose threats to public health and safety and the environment.

(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7498 Ineffectiveness of selected remedy; impracticability of currently available methods of remediation. ([NRS 444.560](#))**

1. The solid waste management authority may determine, based on information developed after the initiation of a remedy or any other information, that compliance with the requirements of [NAC 444.7494](#) is not being achieved by the remedy selected. If the solid waste management authority makes such a determination, the owner or operator shall carry out any other method or technique which could practicably comply with the requirements, unless the solid waste management authority determines pursuant to subsection 2 that compliance cannot be practicably achieved.

2. If the solid waste management authority and the Administrator determine that compliance with the requirements of [NAC 444.7494](#) cannot be practically achieved with any currently available methods, the owner or operator shall:

(a) Obtain certification from a qualified ground-water scientist and the approval of the solid waste management authority and Administrator that compliance with [NAC 444.7494](#) cannot be practically achieved with any currently available methods;

(b) Carry out alternative measures to control exposure of persons or the environment to residual contamination, as necessary to protect public health and safety and the environment;

(c) Carry out alternate measures for the control of the sources of contamination, or for the removal or decontamination of equipment, units, devices or structures which are:

- (1) Technically practicable; and
- (2) Consistent with the overall objective of the remedy; and

(d) Obtain the approval of the solid waste management authority and the Administrator for the alternative measures before carrying out those measures.

3. All solid wastes managed pursuant to a remedy required by [NAC 444.7494](#), [444.7495](#) and [444.7496](#) or an interim measure required by [NAC 444.7497](#) must be managed in a manner which:

- (a) Is protective of public health and safety and the environment; and
- (b) Complies with all applicable requirements set forth in the Resource Conservation and Recovery Act of 1976 (42 U.S.C. §§ 6901 et seq.), as that act existed on November 8, 1993.  
(Added to NAC by Environmental Comm'n, eff. 11-8-93)

**NAC 444.7499 Remedy deemed complete; certification of completion. ([NRS 444.560](#))**

1. A remedy selected pursuant to [NAC 444.7494](#), [444.7495](#) and [444.7496](#) shall be deemed to be complete when each of the following occurs:

(a) The owner or operator complies with the standards for the protection of groundwater established pursuant to [NAC 444.7492](#) at all points within the plume of contamination which lie beyond the system of wells for monitoring the groundwater established pursuant to [NAC 444.7483](#).

(b) The owner or operator demonstrates that concentrations of constituents listed in Appendix II have not exceeded the standards for the protection of groundwater for a period of 3 consecutive years using the statistical procedures and performance standards set forth in [NAC 444.7485](#). The solid waste management authority and Administrator may specify an alternative length of time during which the owner or operator may demonstrate that concentrations of constituents listed in Appendix II have not exceeded the standards for the protection of groundwater, taking into consideration the:

- (1) Extent and concentration of the release;
- (2) Behavioral characteristics of the constituents in the groundwater;
- (3) Accuracy of monitoring or modeling techniques, including any seasonal, meteorological or other environmental variables which may affect the accuracy of those techniques; and
- (4) Characteristics of the groundwater.

(c) All actions required to complete the remedy have been taken.

2. Within 14 days after the completion of the remedy, the owner or operator shall notify the solid waste management authority that a certification that the remedy has been completed in compliance with the requirements of subsection 1 has been placed in the operating records of the disposal site. The certification must be signed by the owner or operator and a qualified groundwater scientist and approved by the solid waste management authority.

3. When, upon completion of the certification, the solid waste management authority determines that the remedy for corrective action has been completed in accordance with the requirements of subsection 1, the owner or operator is no longer required to comply with the requirements for financial assurance for corrective action pursuant to [NAC 444.6852](#).

(Added to NAC by Environmental Comm'n, eff. 11-8-93)