

## **CHAPTER 33.1-20-04.1 GENERAL PERFORMANCE STANDARDS**

### Section

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### **33.1-20-04.1-01. General location standards.**

1. A solid waste management facility may not be located in areas that result in impacts to human health or environmental resources or in an area that is unsuitable because of reasons of topography, geology, hydrology, or soils.
2. Sites for new, or for lateral expansions of, land treatment units, surface impoundments closed with solid waste in place, municipal waste landfills, industrial waste landfills, and special waste landfills must minimize, control, or prevent the movement of waste or waste constituents with geologic conditions and engineered improvements. Sites must be underlain by materials with low permeability to provide a barrier to contaminant migration. Sites for CCR units subject to chapter 33.1-20-08 must also comply with the location standards of section 33.1-20-08-03.
  - a. The following geographic areas or conditions must be excluded in the consideration of a site:
    - (1) Where the waste is disposed within an aquifer;
    - (2) Within a public water supply designated wellhead protection area;
    - (3) Within a one hundred-year floodplain;
    - (4) Where geologic or manmade features, including underground mines, may result in differential settlement and failure of a structure or other improvement on the facility;
    - (5) On the edge of or within:
      - (a) Channels;
      - (b) Ravines; or
      - (c) Areas of steep topography whose slope is unstable due to erosion or mass movement;
    - (6) Within woody draws; or
    - (7) In areas designated as critical habitats for endangered or threatened species of plant, fish, or wildlife.
  - b. The following geographic areas or conditions may not be approved by the department as a site unless the applicant demonstrates there are no reasonable alternatives:

- (1) Over or immediately adjacent to principal glacial drift aquifers identified by the department of water resources;
  - (2) Closer than one thousand feet [304.8 meters] to a down gradient drinking water supply well;
  - (3) Closer than two hundred feet [60.96 meters] horizontally from the ordinary high water elevation of any surface water or wetland;
  - (4) Within final cuts of surface mines; or
  - (5) Closer than one thousand feet [304.8 meters] to any state or national park.
- c. The department may establish alternative criteria based on specific site conditions.
3. No municipal waste landfill or lateral expansion may be located within ten thousand feet [3,048 meters] of any airport runway currently used by turbojet aircraft or five thousand feet [1,524 meters] of any runway currently used by only piston-type aircraft. Owner or operators proposing a new site or lateral expansions for a municipal waste landfill within a five-mile [8.05-kilometer] radius of an airport must notify the affected airport and the federal aviation administration.
  4. A minimum horizontal separation of twenty-five feet [7.62 meters] must be maintained between new or lateral expansions of solid waste management units and any aboveground or underground pipeline or transmission line. The owner shall designate the location of all such lines and easements.

**History:** Effective January 1, 2019; amended effective July 1, 2020; October 1, 2024.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 23

### **33.1-20-04.1-02. General facility standards.**

An owner or operator of a solid waste management facility shall comply with these general facility standards:

1. All personnel involved in solid waste handling and in the facility operation or monitoring must be instructed in specific procedures to ensure compliance with the permit, the facility plans, and this article as necessary to prevent accidents and environmental impacts. Documentation of training, such as names, dates, description of instruction methods, and copies of certificates awarded, must be placed in the facility's operating record.
2. The solid waste management facility shall comply with the water protection provisions of chapter 33.1-20-13.
3. The solid waste management facility may not cause a discharge of pollutants into waters of the state unless such discharge is in compliance with requirements of the North Dakota pollutant discharge elimination system pursuant to chapter 33.1-16-01.
4. The solid waste management facility may not cause a violation of the ambient air quality standard or odor rules, article 33.1-15, at the facility boundary.
5. Suitable control measures must be taken whenever fugitive dust is a nuisance or exceeds the levels specified in article 33.1-15.
6. Open burning is prohibited except as allowed under article 33.1-15.

7. A permanent sign must be posted at the entrance of a facility, or at the entrance of a solid waste management unit used by a facility for wastes generated onsite, which indicates the following:
  - a. The name of the facility;
  - b. The permit number;
  - c. The name and telephone number of the owner and the operator if different than the owner;
  - d. The days and hours the facility is open for access;
  - e. The wastes not accepted for disposal; and
  - f. Any restrictions for trespassing, burning, hauling, or nonconforming dumping.
8. The owner or operator of a facility shall periodically inspect solid waste managed at the facility, on a schedule proposed by the owner or operator and approved by the department, to control and reject unauthorized solid wastes as specified by this article, a permit, or a plan of operation.
9. All litter or windblown rubbish, trash, or garbage must be returned to collection containers or vehicles, to storage containers or areas, or to a solid waste management facility as soon as practicable.

**History:** Effective January 1, 2019.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03, 23.1-08-09; S.L. 2017, ch. 199, § 23

### **33.1-20-04.1-03. Plan of operation.**

All solid waste management facilities, except those permitted by rule in accordance with section 33.1-20-02.1-02, shall meet the requirements of this section.

1. The owner or operator of a solid waste management unit or facility shall prepare and implement a plan of operation approved by the department as part of the permit. The plan must describe the facility's operation to operating personnel and the facility must be operated in accordance with the plan. The plan of operation must be available for inspection at the request of the department. Each plan of operation must include, if applicable:
  - a. A description of waste acceptance procedures, including categories of solid waste to be accepted and waste rejection procedures as required by subsection 2 of section 33.1-20-05.1-02 or subsection 8 of section 33.1-20-06.1-02 or subsection 2 of section 33.1-20-07.1-01 or subsection 4 of section 33.1-20-10-03;
  - b. A description of waste handling procedures;
  - c. A description of facility inspection activities required by subsection 2, including frequency;
  - d. A description of contingency actions for the following:
    - (1) Fire or explosion;
    - (2) Leaks;
    - (3) Ground water contamination;

- (4) Other releases (for example, dust, debris, leachate, failure of run-on diversion or runoff containment systems); and
- (5) Any other issues pertinent to the facility.
- e. Leachate removal system operation and maintenance procedures;
- f. Safety procedures;
- g. For landfills, implementation of sequential partial closure;
- h. A description of industrial waste or special waste management procedures, which include:
  - (1) A procedure for notifying solid waste generators and haulers of the facility operating requirements and restrictions;
  - (2) A procedure for evaluating waste characteristics, liquid content, the specific analyses that may be required for specific wastes, and the criteria used to determine when analyses are necessary, the frequency of testing, and the analytical methods to be used;
  - (3) A procedure for inspecting and for identifying any special management requirements, and the rationale for accepting or rejecting a waste based on its volume and characteristics;
  - (4) Procedures for managing the following solid waste, as appropriate:
    - (a) Bulk chemical containers which contain free product or residue;
    - (b) Asbestos;
    - (c) Waste containing polychlorinated biphenyls at a concentration less than fifty parts per million;
    - (d) Radioactive waste;
    - (e) Rendering and slaughterhouse waste;
    - (f) Wastes that could spontaneously combust or that could ignite other waste because of high temperatures;
    - (g) Foundry waste;
    - (h) Ash from incinerators, resource recovery facilities, and power plants;
    - (i) Paint residues, paint filters, and paint dust;
    - (j) Sludges, including ink sludges, lime sludge, wood sludge, and paper sludge;
    - (k) Fiberglass, urethane, polyurethane, and epoxy resin waste;
    - (l) Spent activated carbon filters;
    - (m) Oil and gas exploration and production waste;
    - (n) Wastes containing free liquids;
    - (o) Contaminated soil waste from cleanup of spilled products or wastes; and

- (p) Any other solid waste that the owner or operator plans to handle.
- (5) A description of any solid waste that will not be accepted at the facility; and
  - i. The owner or operator shall amend the plan whenever operating procedures, contingency actions, waste management procedures, or wastes have changed. The owner or operator shall submit the amended plan to the department for approval or disapproval.
- 2. The owner or operator shall inspect the facility to ensure compliance with this article, a permit, and approved plans. The owner or operator shall keep an inspection log including information such as the date of inspection, the name of the inspector, a notation of observations made, and the date and nature of any repairs or corrective action taken.

**History:** Effective January 1, 2019; amended effective July 1, 2020; October 1, 2024.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03, 23.1-08-09; S.L. 2017, ch. 199, § 23

### **33.1-20-04.1-04. Recordkeeping and reporting.**

The owner or operator of a solid waste management facility, except those permitted by rule in accordance with section 33.1-20-02.1-02, shall comply with these recordkeeping and reporting requirements:

- 1. A solid waste management facility may not accept solid waste until the department has received and approved a report which includes narrative, drawings, and test results to certify that the facility has been constructed in accordance with the approved plans and specifications and as required by the permit.
- 2. An owner or operator shall keep an operating record consisting of a copy of each application, plan, report, notice, drawing, inspection log, test result or other document required by this article, including those enumerated in the subdivisions of this subsection, or a permit. The operating record must include any deviations from this article, the permit, and facility plans where department approval is required. The owner or operator shall provide a copy of any document in the operating record upon receiving a request from the department. The operating record must be kept at the facility, or at a location near the facility within North Dakota and approved by the department.
  - a. The permit preapplication, section 33.1-20-03.1-01.
  - b. The permit application, section 33.1-20-03.1-02.
  - c. An amended permit application, section 33.1-20-03.1-03.
  - d. The site characterization, section 33.1-20-13-01.
  - e. Any site demonstrations, section 33.1-20-04.1-01.
  - f. Documentation of training, section 33.1-20-04.1-02.
  - g. The plan of operation, section 33.1-20-04.1-03.
  - h. Facility inspection logs, section 33.1-20-04.1-03.
  - i. Records of notice, section 33.1-20-02.1-05.
  - j. As-built drawings and certifications, subsection 1 and section 33.1-20-04.1-05.

- k. The ground water monitoring plan, all monitoring data, and statistical interpretations, section 33.1-20-13-02.
  - l. Records of the weight or volume of waste, section 33.1-20-04.1-09.
  - m. The closure plan, sections 33.1-20-04.1-05 and 33.1-20-14-02.
  - n. The postclosure plan, sections 33.1-20-04.1-09 and 33.1-20-14-02.
  - o. The financial assurance instruments for closure and postclosure, chapter 33.1-20-14.
  - p. Records of gas monitoring and remediation, section 33.1-20-06.1-02.
  - q. The annual report, subsection 3.
  - r. Notices of intent to close and completion of postclosure, sections 33.1-20-04.1-05 and 33.1-20-04.1-09 respectively.
  - s. The permit and any modifications, sections 33.1-20-02.1-04 and 33.1-20-02.1-07.
3. An owner or operator shall prepare and submit a searchable electronic copy of an annual report to the department by March first of each year. The annual report must cover facility activities during the previous calendar year and must include the following information:
- a. Name and address of the facility;
  - b. Calendar period covered by the report;
  - c. Annual quantity for each category of solid waste in tons or volume;
  - d. Identification of occurrences and conditions that prevented compliance with the permit and this article; and
  - e. Other items identified in the facility plans and permit.
4. An owner or operator required to monitor ground water pursuant to chapter 33.1-20-13 shall prepare and submit a ground water annual report to the department by April first of each year. The ground water annual report must cover ground water analysis for the facility during the previous calendar year and must include the following information:
- a. Name and address of the facility;
  - b. Calendar period covered by the report;
  - c. A map, aerial image, or diagram showing the solid waste unit and all background (or upgradient) and downgradient monitoring wells and the well identification numbers for the wells that are part of the ground water monitoring program for the solid waste unit;
  - d. Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;
  - e. All monitoring data obtained and a summary including the number of ground water samples that were collected for analysis for each background (or upgradient) and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;
  - f. Statistical interpretations;

- g. A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituents detected at a statistically significant increase over background levels);
- h. Identification of occurrences and conditions that prevented compliance with the permit or this article; and
- i. Other items identified in the facility plans and permit.

**History:** Effective January 1, 2019; amended effective July 1, 2020; October 1, 2024.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03, 23.1-08-09; S.L. 2017, ch. 199, § 23

### **33.1-20-04.1-05. General closure standards.**

The requirements of this section apply to all solid waste management facilities, unless otherwise specified.

1. Each owner or operator shall close their facility in a manner that:
  - a. Minimizes the need for further maintenance; and
  - b. Controls, minimizes, or eliminates any escape of solid waste constituents, leachate, fugitive emissions, contaminated runoff, or waste decomposition products.
2. Sequential partial closure must be implemented to minimize the working face of a landfill.
3. Closure must be implemented within thirty days after receipt of the final volume of waste and must be completed within one hundred eighty days following the beginning of closure activities, unless otherwise specified and approved under subsection 5. Prior to beginning closure, the owner or operator shall notify the department in writing of the intent to close.
4. The owner or operator of a landfill for which closure is completed in part or whole shall enter into the operating record and submit to the department:
  - a. As-built drawings showing the topography, pertinent design features, extent of waste, and other appropriate information; and
  - b. Certification by the owner or operator and a qualified professional engineer that closure has been completed in accordance with the approved closure plan and this article. Closure of a publicly owned inert landfill that receives, on average, less than forty tons [36.3 metric tons] per day does not require certification by a qualified professional engineer unless the total cost of closure is greater than two hundred thousand dollars.
5. Each owner or operator shall prepare and implement a written closure plan approved by the department as part of the permitting process. The closure plan must:
  - a. Estimate the largest area ever requiring final cover at any time during the active life of the site;
  - b. Estimate the maximum inventory of solid waste onsite over the active life of the facility;
  - c. For landfills, describe the final cover and the methods to install the cover;
  - d. Project time intervals at which sequential partial closure or closure is to be implemented;
  - e. Describe the resources and equipment necessary for closure; and

- f. Identify closure costs estimates and provide financial assurance mechanisms as required by chapter 33.1-20-14.

**History:** Effective January 1, 2019; amended effective July 1, 2020; October 1, 2024.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03, 23.1-08-09; S.L. 2017, ch. 199, § 23

### **33.1-20-04.1-06. Transfer stations, processing systems, and drop box facilities.**

1. Transfer stations and processing systems must be designed, constructed, and operated to meet the following, where applicable:
  - a. Control access and maintain aesthetics with a combination of fencing, trees, shrubbery, or natural features;
  - b. Be sturdy and constructed of easily cleanable material;
  - c. Provide effective control of birds, rodents, insects, and other vermin;
  - d. Be adequately screened to prevent and control blowing of litter;
  - e. Provide protection of the tipping floor from wind, rain, or snow;
  - f. Minimize noise and dust nuisances;
  - g. Provide pollution control measures to protect surface water and ground water including runoff and equipment wash down water control measures;
  - h. Provide all-weather access roads and vehicular traffic areas;
  - i. Provide any necessary pollution control measures to protect air quality including odor and dust control and prohibit burning;
  - j. Prohibit scavenging;
  - k. Have communication capabilities to immediately summon fire, police, or emergency personnel in the event of an emergency; and
  - l. Remove all solid waste from the facility at closure to a permitted facility.
2. Drop box facilities must:
  - a. Be accessible by all-weather roads;
  - b. Be designed and serviced as often as necessary to ensure adequate capacity. Storage of solid waste outside the detachable containers is prohibited; and
  - c. Remove all remaining solid waste to a permitted facility and remove the drop box from the facility at closure.

**History:** Effective January 1, 2019.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 23

### **33.1-20-04.1-07. Piles used for storage and treatment - Standards.**

This section is applicable to solid waste stored or treated in piles, composting, sludge piles, scrap tire piles, garbage which is in place for more than three days, putrescible waste, other than garbage,

which is in place for more than three weeks, and other solid waste which is in place for more than one month.

1. Vector control measures must be instituted when necessary to prevent the transmission of disease and otherwise prevent and reduce hazards created by rats, snakes, insects, birds, cats, dogs, skunks, and other animals or vermin.
2. An owner and operator of a waste pile, except composting of grass and leaves, shall:
  - a. Comply with the general facility standards of section 33.1-20-04.1-02; and
  - b. Maintain the site including the removal of all solid waste, as necessary, and at closure to a permitted facility, or otherwise manage the waste that is in keeping with the purpose of this article.
3. Requirements for waste piles likely to produce a leachate are:
  - a. Waste piles must be underlain by concrete, asphalt, clay, or an artificial liner. The liner must be of sufficient thickness and strength to withstand stresses imposed by waste handling equipment and the pile;
  - b. Runoff and run-on control systems must be designed, installed, and maintained to handle a twenty-five-year, twenty-four-hour storm event;
  - c. Based on site and waste characteristics and the proposed operation, the department may require that waste piles have the following:
    - (1) A ground water monitoring system that complies with chapter 33.1-20-13;
    - (2) A leachate collection and treatment system; and
    - (3) Financial assurance; and
  - d. The department may require that the entire base or liner be inspected for wear and integrity and repaired or replaced by removing storage waste or otherwise providing inspection access to the base or liner.
4. An owner or operator of a tire pile shall:
  - a. Control access to the tire pile by fencing;
  - b. Limit piles of scrap tires to a maximum basal area of ten thousand square feet [929 square meters] in size, which, along with the fire lane, must be underlain by concrete, asphalt, clay overlain with gravel, or other appropriate material of sufficient thickness, strength, and low permeability to withstand stresses imposed by waste handling equipment, fire control equipment, and to minimize liquid infiltration in case of a fire;
  - c. Limit the height of the tire pile to twenty feet [6.1 meters];
  - d. Provide for a fifty-foot [15.24-meter] fire lane around the tire pile;
  - e. Provide site access by fire control equipment;
  - f. Provide run-on and runoff control systems adequate to control surface water from a twenty-five-year, twenty-four-hour precipitation event; and
  - g. Provide financial assurance adequate to remove stockpiled waste and to remediate environmental contingencies.

5. An owner or operator of a composting facility for grass and leaves shall:
  - a. Direct surface water or storm water from composting and waste storage areas;
  - b. Control surface water drainage to prevent leachate runoff;
  - c. Store solid waste separated from compostable material in a manner that controls vectors and aesthetic degradation, and remove this solid waste from the site to an appropriate facility at least weekly;
  - d. Turn the yard waste periodically to aerate the waste, maintain temperatures, and control odors; and
  - e. Prevent the occurrence of sharp objects greater than one inch [2.54 centimeters] in size in finished compost offered for use.

**History:** Effective January 1, 2019; amended effective October 1, 2024.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 23

### **33.1-20-04.1-08. Treatment and resource recovery facilities.**

In addition to sections 33.1-20-04.1-02, 33.1-20-04.1-03, 33.1-20-04.1-04, and 33.1-20-04.1-05, the owner or operator of a facility which conducts treatment or resource recovery other than processing shall comply with these standards.

1. All liquids must be collected and treated to meet the water protection provisions of chapter 33.1-20-13.
2. Surface water must be diverted away from all open storage areas.
3. Solid waste must be confined to storage containers and areas specifically designed to store waste. Waste handling and storage systems must provide sufficient excess capacity to prevent nuisances, environmental impacts, or health hazards in the event of mechanical failure or unusual waste flows.
4. Resource recovery systems or facilities must be operated on first-in, first-out basis. Stored solid waste containing garbage may not be allowed to remain unprocessed for more than forty-eight hours unless adequate provisions are made to control flies, rodents, odors, or other environmental hazards or nuisances.
5. All solid waste, recovered materials, or residues must be controlled and stored in a manner that does not constitute a fire or safety hazard or a sanitary nuisance.
6. All residues from resource recovery systems or facilities must be handled and disposed according to this article.
7. All incinerators used for solid waste must be constructed and operated in compliance with article 33.1-15.

**History:** Effective January 1, 2019.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03, 23.1-08-08, 23.1-08-15; S.L. 2017, ch. 199, § 23

### **33.1-20-04.1-09. General disposal standards.**

1. In addition to sections 33.1-20-04.1-02, 33.1-20-04.1-03, 33.1-20-04.1-04, and 33.1-20-04.1-05, the standards of this section apply to all landfills, surface impoundments closed with solid waste in place, and land treatment units, unless otherwise indicated.
2. Construction and operation standards for solid waste management facilities regulated by this section:
  - a. Every solid waste landfill or facility must have and maintain, or have access to, equipment adequate for the excavation, compaction, covering, surface water management, and monitoring procedures required by approval plans and this article.
  - b. Roads must be constructed and maintained to provide access to the facility. Access roads must be cleaned and decontaminated as necessary.
  - c. There must be available an adequate supply of suitable cover material, which, if necessary, must be stockpiled and protected for winter operation.
  - d. The final cover of all disposal facilities must be designed and constructed in a manner that ensures the quality and integrity of the hydraulic barrier and the protective vegetative cover.
  - e. The working face or open area of a landfill must be limited in size to as small an area as practicable. Sequential partial closure must be implemented as necessary to keep the disposal area as small as practicable and to close filled areas in a timely manner.
  - f. All disposal facilities must identify, quantify, remove, stockpile, and maintain suitable plant growth material for later use in closure.
  - g. Any recycling or salvage activity must be authorized by the owner or operator and must be in a separate area in a manner to avoid injury and interference with the landfill operation.
  - h. Vehicles, farm machinery, metal appliances, mobile homes, trailers, or other similar items brought to the facility for recycling may be stored temporarily in a separate area.
  - i. Vector control measures, in addition to the application of cover material, must be instituted whenever necessary to prevent the transmission of disease, prevent bird hazards to aircraft, and otherwise prevent and reduce hazards created by rats, flies, snakes, insects, birds, cats, dogs, and skunks.
  - j. All domestic animals must be excluded from the facility. Feeding of garbage to animals is prohibited.
  - k. All earthen material must be maintained onsite unless removal from the site is authorized by the department.
3. Construction and operation standards, excluding inert waste landfills.
  - a. The landfill must be designed and operated to prevent the run-on and runoff of surface waters resulting from a maximum flow of a twenty-five-year, twenty-four-hour storm.
  - b. Facilities receiving on average over twenty tons [18.2 metric tons] per day of solid waste shall make provisions for measuring all waste delivered to and disposed in the facility. Weight measurements are preferable; volume measurements (cubic yards) are acceptable.

- c. Active areas of the landfill must be surveyed periodically to ensure that filling is proceeding in a manner consistent with the landfill design and that closure grades are not exceeded.
  - d. All run-on or runoff must be properly controlled to avoid its concentration on or in solid waste and to minimize infiltration into the waste material. Disposal must avoid any areas within the facility where run-on or runoff accumulates.
  - e. Leachate removal systems must be operated and maintained to assure continued function according to the design efficiency. This must include, where applicable:
    - (1) Flushing, inspection and, if necessary, repair of collection lines after placement of the first layer of waste in a landfill cell;
    - (2) Annual sampling and analysis of leachate for the parameters required under the ground water quality monitoring required under section 33.1-20-13-02;
    - (3) At minimum, semiannual monitoring of leachate head or elevations above the liner;
    - (4) Annual flushing of leachate collection lines to remove dirt and scale; and
    - (5) Inclusion of leachate removal system operation, inspection, and maintenance procedures in the operating record.
  - f. No composite liner may be exposed to freezing more than one winter season, excluding composite liners in surface impoundments. At least three feet [0.91 meters] of solid waste or other material approved by the department must be placed above the upper drainage layer on all lined areas by December first. No disposal may take place after December first in areas that have not met this requirement without first testing the composite liner's integrity and receiving approval from the department.
4. Closure standards, excluding land treatment units.
- a. Closed solid waste management units may not be used for cultivated crops, heavy grazing, buildings, or any other use which might disturb the protective vegetative and soil cover.
  - b. All solid waste management units must be closed with a final cover designed to:
    - (1) Limit the amount of percolation that may enter the waste to meet the efficiency requirements for that type of solid waste management unit;
    - (2) Minimize precipitation run-on from adjacent areas;
    - (3) Minimize erosion and optimize drainage of precipitation falling on the landfill. The grade of slopes may not be less than three percent, nor more than fifteen percent, unless the applicant or permittee provides justification to show steeper slopes are stable and will not result in long-term surface soil loss in excess of two tons [1.82 metric tons] per acre per year. In no instance may slopes exceed twenty-five percent, including exterior slope of any swales or drainage structures; and
    - (4) Provide a surface drainage system which does not adversely affect drainage from adjacent lands.
  - c. The final cover must include six inches [15.2 centimeters] or more of suitable plant growth material which must be seeded with shallow rooted grass or native vegetation.

- d. The department may allow, on a case-by-case basis, the use of closed inert waste landfill sites for certain beneficial uses that would not pose a threat to human health or the environment.
5. Postclosure standards for solid waste management facilities regulated by this section.
- a. During the postclosure period, the owner or operator of a landfill or a surface impoundment closed with solid waste in place shall:
    - (1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover to correct effects of settlement, subsidence, and other events, and preventing run-on and runoff from eroding or otherwise damaging the final cover;
    - (2) Maintain and operate the leachate collection system, if applicable;
    - (3) Monitor the ground water and maintain the ground water monitoring system, if applicable; and
    - (4) Operate and maintain the gas control system, if applicable.
  - b. The owner or operator of a municipal waste landfill, an industrial waste landfill, a special waste landfill, a surface impoundment closed with solid waste remaining in place, or a land treatment facility shall prepare and implement a written postclosure plan approved by the department as a part of the permitting process. The postclosure plan must address facility maintenance and monitoring activities for a postclosure period of thirty years.
    - (1) Postclosure includes appropriate ground water monitoring; surface water monitoring; gas monitoring; and maintenance of the facility, facility structures, and ground water monitoring systems.
    - (2) The postclosure plan must provide the name, address, and telephone number of the person or office to contact during the postclosure period; and project time intervals at which postclosure activities are to be implemented, identify postclosure cost estimates, and provide financial assurance mechanisms as required by chapter 33.1-20-14.
    - (3) The department may require an owner or operator to amend the postclosure plan, including an extension of the postclosure period, and implement the changes. If the permittee demonstrates that the facility is stabilized, the department may authorize the owner or operator to discontinue postclosure activities.
  - c. Following completion of the postclosure period, the owner or operator shall notify the department verifying that postclosure management has been completed in accordance with the postclosure plan.

**History:** Effective January 1, 2019; amended effective July 1, 2020; October 1, 2024.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1

**Law Implemented:** NDCC 23.1-08-03, 23.1-08-09; S.L. 2017, ch. 199, § 23

**33.1-20-04.1-10. Other methods of solid waste management - Standards.**

New and unique methods developed subsequent to July 1, 2020, which can be utilized without environmental degradation and creation of hazards to public health and safety will be considered by the department.

**History:** Effective January 1, 2019; amended effective July 1, 2020.

**General Authority:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 1  
**Law Implemented:** NDCC 23.1-08-03; S.L. 2017, ch. 199, § 23