

**567—113.12 (455B) Closure criteria.** All MSWLFs shall comply with the following closure requirements.

**113.12(1)** Owners or operators of all MSWLF units must install a final cover system that is designed to minimize infiltration and erosion. The final cover system must be designed and constructed to:

- a.* Have a permeability less than or equal to the permeability of any bottom liner system (for MSWLFs with some type of liner) or have a permeability no greater than  $1 \times 10^{-7}$  cm/sec, whichever is less;
- b.* Minimize infiltration through the closed MSWLF by the use of an infiltration layer that contains a minimum of 18 inches of compacted earthen material;
- c.* Minimize erosion of the final cover by the use of an erosion layer that contains a minimum of 24 inches of earthen material that is capable of sustaining native plant growth;
- d.* Have an infiltration layer and erosion layer that are a combined minimum of 42 inches of earthen material at all locations over the closed MSWLF unit; and
- e.* Have a slope between 5 percent and 25 percent. Steeper slopes may be used if it is demonstrated that a steeper slope is unlikely to adversely affect final cover system integrity.

**113.12(2)** The department may approve an alternative final cover design that includes:

- a.* An infiltration layer that achieves reduction in infiltration equivalent to the infiltration layer specified in paragraphs 113.12(1) “*a*” and 113.12(1) “*b*”; and
- b.* An erosion layer that provides protection from wind and water erosion equivalent to the erosion layer specified in paragraphs 113.12(1) “*c*” and 113.12(1) “*d*.”

**113.12(3)** The owner or operator must prepare a written closure plan that describes the steps necessary to close all MSWLF units at any point during the active life in accordance with the cover design requirements in subrule 113.12(1) or 113.12(2), as applicable. The closure plan, at a minimum, must include the following information:

- a.* A description of the final cover including source, volume, and characteristics of cover material, designed in accordance with subrule 113.12(1) or 113.12(2) and the methods and procedures to be used to install the cover;
- b.* An estimate of the largest area of the MSWLF unit requiring a final cover, as required under subrule 113.12(1) or 113.12(2), at any time during the active life;
- c.* An estimate of the maximum inventory of wastes on site over the active life of the landfill facility; and
- d.* A schedule for completing all activities necessary to satisfy the closure criteria in rule 567—113.12(455B).

**113.12(4)** The owner or operator must notify the department that the closure plan has been placed in the operating record no later than the initial receipt of waste in a new MSWLF unit.

**113.12(5)** At least 180 days prior to beginning closure of each MSWLF unit as specified in subrule 113.12(6), an owner or operator must notify the department of the intent to close the MSWLF unit, and that a notice of the intent to close the unit has been placed in the operating record. If the MSWLF facility will no longer be accepting MSW for disposal, then the owner or operator must also notify all local governments utilizing the facility and post a public notice of the intent to close and no longer to accept MSW.

**113.12(6)** The owner or operator must begin closure activities of each MSWLF unit:

- a.* No later than 30 days after the date on which the MSWLF unit receives the known final receipt of wastes; or
- b.* If the MSWLF unit has remaining capacity and there is a reasonable likelihood that the MSWLF unit will receive additional wastes, no later than one year after the most recent receipt of wastes. Extensions beyond the one-year deadline for beginning closure may be granted by the department if the owner or operator demonstrates that the MSWLF unit has the capacity to receive

additional wastes and the owner or operator has taken and will continue to take all steps necessary to prevent threats to human health and the environment from the unclosed MSWLF unit.

**113.12(7)** The owner or operator of all MSWLF units must complete closure activities of each MSWLF unit in accordance with the closure plan within 180 days following the beginning of closure as specified in subrule 113.12(6). Extensions of the closure period may be granted by the department 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 steps to prevent threats to human health and the environment from the unclosed MSWLF unit.

**113.12(8)** Following closure of each MSWLF unit, the owner or operator must submit to the department certification, signed by an independent professional engineer (P.E.) registered in Iowa, verifying that closure has been completed in accordance with the closure plan. Upon approval by the department, the certification shall be placed in the operating record.

**113.12(9)** Following closure of all MSWLF units, the owner or operator must record a notation on the deed to the landfill facility property, or some other instrument that is normally examined during title search in lieu of a deed notification, and notify the department that the notation has been recorded and a copy has been placed in the operating record. The notation on the deed must in perpetuity notify any potential purchaser of the property that:

- a.* The land has been used as a landfill facility; and
- b.* Its use is restricted under paragraph 113.13(3) “*c.*”

**113.12(10)** The owner or operator may request permission from the department to remove the notation from the deed if all wastes are removed from the facility.