



# Closure of feedlots or manure storage areas

## Background

The proper abandonment and closure of an animal feedlot or manure storage area that has ceased operation is important from both an environmental and safety perspective. Runoff and seepage from abandoned feedlots and manure storage areas can contribute to surface-water or ground-water pollution. Abandoned manure storage areas can be a potential source of detrimental gases, such as hydrogen sulfide, or present a drowning hazard.



## Temporary and permanent closure

In some instances, such as poor market conditions, a feedlot owner may desire to suspend use of a feedlot or feedlot components for a short period of time with the intent to resume operation in the near future. This type of closure is referred to as temporary closure. When a feedlot owner has no desire to resume operation in the near future, the feedlot or manure storage area is required to undergo the permanent closure process.

## Temporary closure requirements

Within one year of ceasing operation, the feedlot owner must remove all manure from any facility component that will be temporarily closed. When a liquid manure storage area is temporarily closed, the owner must maintain at least two (2) feet of liquids (water or manure) to protect the liner from freeze/thaw complications, follow all required operation and maintenance activities, and freeboard to prevent overflow. If the liquid manure storage area is temporarily closed for three (3) years or more, the owner must have an engineer evaluate the condition of the structure and request approval from the MPCA prior to resuming operation.

## Permanent closure requirements

For any type of facility component that is permanently closed the feedlot owner must, within one year of ceasing operation, remove all manure and land apply the material at agronomic rates. Additional permanent closure requirements vary with the type of feedlot component that is being closed as outlined below:

- **Closure of animal holding areas and manure stockpile sites**

When the animal holding area or manure stockpile site has an earthen floor, the feedlot owner must remove all visibly contaminated soils in addition to removing the manure itself. As soon as possible,

following removal of manure and contaminated soils, the feedlot owner must establish a perennial vegetative cover on the site and maintain that cover for at least five (5) years, unless a structure or other impervious surface will be constructed over the closed animal holding area within 60 days.

When the animal holding area or stockpile site has a concrete, asphalt, or other impervious floor and the feedlot owner removes this impervious material, they must also then remove any underlying soils that are visibly contaminated. Removal of the impervious floor material is not required.

- **Closure of liquid manure storage areas**

Following manure removal, the feedlot owner must remove any remaining sludge at the bottom of the liquid manure storage area and apply on cropland at agronomic rates. The bottom sludge should be tested independently of the manure itself and will typically be high in phosphorus.

For an earthen-lined liquid manure storage area, the feedlot owner must also remove all visibly contaminated soils. For liquid manure storage areas with other types of liners the feedlot owner must wash, flush, or scrape the liner to remove any residual manure. Removal of the non-earthen liner material is not required; however, should this material be removed, the feedlot owner must also then remove any underlying soils that are visibly contaminated. Disposal/burial of non-earthen liner material must also follow any other applicable regulations.

After removing manure and applicable manure-contaminated soils, the feedlot owner may choose to either fill the area with clean soils or leave the area open to act as a wildlife pond or other similar use.

## **Permanent closure notification requirements**

It is recommended for all sites, but only required for sites with a National Pollutant Discharge Elimination System or State Disposal System permit, that notification be given to the MPCA or county feedlot officer following the removal of manure and manure-contaminated soils and prior to placement of any fill or cover material. This will allow time for a potential site inspection to ensure sufficient removal of contaminated materials and eliminate future concerns regarding the adequacy of the closure process.

Within 60 days of completing permanent closure, all feedlot owners must submit a certified letter to the MPCA or the county feedlot officer stating the name and location of the facility and indicating what feedlot components have been permanently closed.

## **For more information**

For more detailed information on the closure requirements for a feedlot or manure storage area, please see Minn. R. chap. 7020.2025. The revised feedlot rule and other fact sheets can be downloaded from the MPCA website at: <https://www.pca.state.mn.us/quick-links/feedlot-program>.

For more information call your county feedlot officer, or your MPCA regional office.

Rochester: 507-285-7343

Mankato: 507-389-5977

Marshall: 507-537-7146

Willmar: 320-214-3786

Detroit Lakes: 218-847-1519

Brainerd: 218-828-2492

St. Paul: 651-296-6300