



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

Animal Mortality Plan

NPDES/SDS Permit Program

Feedlot Program

Doc Type: Permit Application

Purpose: This *Animal Mortality Plan* is for handling dead animals in accordance with State requirements, including Minn. Stat. § 35.82 and Minn. R. chs. 1719.0100 to 1719.4600 and 7011.1215. This plan is incorporated into the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit and submitted to the Minnesota Pollution Control Agency (MPCA).

Facility name: _____ Feedlot registration no. _____

Owner/Operator name: _____ Feedlot permit no. _____

Planned method of animal disposal: Complete the table below by identifying the animal type, the primary method and the secondary method of disposal of dead animals at your feedlot. The legal methods of disposal are listed below and the minimum requirements for each management option are described on the following page. Please make sure the locations of burial sites, incinerators, temporary mortality storage, and/or compost areas are indicated on the site sketch of your facility included with the NPDES/SDS Permit application.

Catastrophic loss: A catastrophic event such as a fire, collapse, tornado, floods or loss of power that results in a mass amount of animal mortalities shall be reported within 24 hours after the event started. Notifications should include the Minnesota Department of Public Safety Duty Officer at 800-422-0798 and the MPCA.

Animal type	Primary method	Secondary method	Catastrophic loss
			Minnesota Duty Officer: 1-800-422-0798

Check here: ☐ By checking here, I indicated that I have read and understand the minimum requirements listed on the second page of this form for the dead animal disposal options identified above for my operation. I agree to adhere to and follow the minimum requirements for the proper disposal of dead animals.

Legal Methods of Disposal

Species	Method				
	Bury	Incinerate	Render	Compost	Exempt by Law
Poultry	R	R	R	R	£
Swine	R	R	R	R	£
Cattle	R	R	R	£*	£
Horses	R	R	R	£*	£
Sheep/Goats	R	R	R	R	£
Household pets	£	£	£	£	R
Wild animals	£	£	£	£	R
Game farm/Exotic animals	R	R	R	£*	£

* If composting cattle, horses, or game/exotic animals, contact the Minnesota Board of Animal Health at 651-296-2942 or 800-627-3529.

Animal carcasses should be disposed of as soon as possible, within 48-72 hours. Any vehicles transporting carcasses must be: leak proof, covered, inspected, and permitted by the Minnesota Board of Animal Health (If owner is transporting his own dead animals a permit is not required).

Bury

Operators choosing to bury animals must select sites very carefully due to the high risk of ground-water contamination. Buried carcasses must:

- Stay five (5) feet above seasonal high water table.
- Stay 1000' away from lakes and 300' away from rivers, streams, ditches, etc.
- Be covered immediately with enough soil to keep scavengers out (Minnesota Board of Animal Health guidelines indicate three (3) feet is sufficient).
- Not be placed in sandy or gravelly soil types.
- Maintain at least ten (10) feet vertical separation between dead animals and bedrock.

Compost

The composting process must, at a minimum, meet the following:

- The owner of the compost facility shall have a written protocol for the operation containing at least the minimum steps listed below and instructing all employees to follow the protocol.
- Mortalities must be processed daily.
- A base of litter is required. The carcasses or discarded animal parts and litter plus bulking agent are added in layers so that the carbon to nitrogen ratio is in the range of 15:1 to 35:1 (optimal 23:1).
- The carcasses or discarded animal parts must be kept six (6) inches from the edges and sealed with litter each day.
- The temperature must be taken and recorded on site daily. The compost temperature must reach a minimum of 130 degrees Fahrenheit. Approximately seven (7) to ten (10) days are needed in each heat cycle to process the carcasses and kill the pathogens. The temperature drop indicates the time to mix and move the compost. A minimum of two (2) heat cycles is required.
- The finished compost must not contain visible pieces of soft tissue and must be handled, stored, and used according to all other applicable rules.

In addition, composting facilities must be:

- Built on an impervious*, weight-bearing pad that is large enough to allow equipment to maneuver.
- Covered with a roof to prevent excessive moisture on the composting material, but if sawdust or other water-repelling material is used as the bulking agent, a roof may not be necessary.
- Built of rot-resistant material that is strong enough to withstand the force exerted by equipment.
- Large enough to handle each day's normal mortality through the endpoint of the composting which consists of a minimum of two (2) heat cycles.

Incinerate

Incinerator must be:

- Capable of producing emissions not to exceed 20 percent opacity.
- Fitted with an afterburner that maintains flue gases at 1,200 degrees Fahrenheit for at least 0.3 seconds.
- Ash from the incinerator must be handled in such a manner as to prevent particulate matter from becoming airborne.

In addition, it is recommended that the incinerator is large enough to handle each day's mortalities.

Render

Carcasses left at an off-site pickup point must be:

- Kept in an animal-proof, enclosed area.
- At least 200 yards from a neighbor's buildings.
- Picked up within 72 hours.
- If the enclosed area is refrigerated to less than 45 degrees Fahrenheit, the carcasses must be picked up within seven (7) days.

Alternative methods

Alternative methods of mortality disposal including, but not limited to, pet food processing, fur farm consumption, lactic fermentation, extrusion, and experimental composting, require a permit from the Minnesota Board of Animal Health. For more information on alternative methods of carcass disposal, contact the Board of Animal Health at 651-296-2942.

*For the purpose of compost pad construction, Class V gravel material is not considered to be impervious.