

Animal Mortality Plan

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

Farm/Name: _____ **Feedlot Registration Number:** _____

Owner: _____ **Operator:** _____

Location: Section _____, _____ Township, _____ County

Planned Method of Animal Disposal: For each animal type, indicate dead animal handling method(s) to be used at your feedlot. The minimum requirements for each management option are described on the following page. Please make sure locations of burial sites, incinerators, temporary mortality storage, and/or compost areas are indicated on the map of your facility included with the NPDES/SDS permit application.

Animal Type	Bury	Incinerate	Render	Compost	Other
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If other, explain: _____

Legal Methods of Disposal:

SPECIES	METHOD				Exempt by Law
	Bury	Incinerate	Render	Compost	
Poultry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Swine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cattle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> *	<input type="checkbox"/>
Horses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> *	<input type="checkbox"/>
Sheep / Goats	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Household Pets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wild Animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Game Farm / Exotic Animals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> *	<input type="checkbox"/>

* 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 (except if owner is transporting his own dead animals).

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 away from lakes, 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; and
- 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; and
- 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; and
- 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; and
- 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.