



Mortality & Veterinary Medical Waste Disposal

Livestock System Progressive Planning Fact Sheet

Dale Rozeboom, Michigan State University and Joe Kelpinski, Michigan Department of

Livestock mortality is an expected event in livestock production. Some percentage of livestock will be lost each year for various reasons that are beyond the control of owners and managers. This document will explain what options are available to producers and what records need to be maintained as it pertains to livestock mortality and subsequent disposal.

Livestock mortality in the state of Michigan is covered under the Bodies of Dead Animals Act 239 of 1982, commonly referred to as BODA. BODA requires all mortality to be disposed of within 24 hours after death regardless of method of disposal, unless stored in a secure area at less than 40 degrees Fahrenheit for a maximum of 7 days or at less than zero degrees Fahrenheit for a maximum of 30 days.

Components

Burial

Burial sites must have no contact with bodies of water, both surface and ground, and must be at least 200 feet from wells. Frozen ground makes burial difficult.

- Individual graves must be:
 1. At least 2 feet beneath the natural surface
 2. Limited to 100 graves/acre or 5 tons of tissue per acre
 3. Separated by a minimum of 2.5 feet
 4. Closed within 24 hours of opening
- Common graves must:
 1. Be limited to 2.5 tons of tissue per acre
 2. Be separated by minimum of 100 feet
 3. Have each day's mortality covered with minimum of 1 foot of soil
 4. Not remain open for longer than 30 days
 5. Have at least 2 feet of soil as final cover

Producers should maintain records of burial indefinitely. The records should include dates, volume of mortality in pounds, location of burial, and common or individual grave. For MAEAP verification or Right to Farm investigation, a producer can/will be asked to produce these records.

Incineration

- Must have a permit issued by the Air Quality Division of MDEQ (If not permitted, they are operating illegally)
- May also be subject to local licensing/permitting
- Residue from incinerators may be buried, applied to cropland at agronomic rates or taken to a licensed landfill.
- Records are not required, yet it would be prudent to maintain records of volume incinerated for at least two years. This information will help CNMP providers account accurately for these nutrients in the plan.

Rendering

- On farm or at a central collection point
- Remember the time requirements stated in BODA for disposal of mortality
- Records are not required. However, as with incineration, two years worth of volume records kept will aid in CNMP development and accuracy.

Landfill (20 licensed to take dead animals)

- Arrangements can be made for pick-up by the waste management firms, but again producers must follow the timeline for disposal set forth by BODA.
- Records are not required, yet two years worth of records will be useful for CNMP providers.

Composting

- Strict state guidelines as to the acceptability of facilities for composting, methods of composting, and guidelines must be followed.
- These are set forth in the BODA document.
- Producers should work closely with MSU Extension personnel or other trained individuals that can describe in detail these requirements.
- Simply piling carcasses under some straw or sawdust in an out of the way area is not legal or suitable.

Producers must initially maintain two years worth of records on their composting. These initial records are required and should be kept indefinitely. Failure to provide these records is a violation of the rules stated in BODA.

- Records include:
 - Volume of tissue put into the compost pile
 - Turn dates
 - Twice per week temperature measurement of bins or piles
 - Disposal location
 - Disposal volume and dates

Vet Waste

Additionally, producers should keep in mind that animal health care needles and syringes must be placed into a puncture-resistant container, labeled and taken to a licensed landfill. Any unwanted or unusable animal medications and health care products should be taken to a licensed landfill, veterinarian, or distributor for disposal.

Resources

- Michigan State University Extension
- Certified Comprehensive Nutrient Management Plan (CNMP) provider

Other Resources

- Composting record forms are available on the MAEAP website.
- The Bodies of Dead Animals Act is available from the Michigan Department of Agriculture upon request.

Timing Anytime.