Livestock Mortality Management

Updated solid waste rules outline requirements for burial of livestock/poultry mortalities and removes temporary allowance for burial by CAFO farms

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New York State Department of Environmental Conservation (NYSDEC) and Department of Agriculture and Markets (NYSAGM) have updated the livestock mortality management guidance to reflect recent changes in NYSDEC’s Division of Materials Management regulations for mortality burial and clarify that the burial option, temporarily allowable by NYSDEC for Concentrated Animal Feeding Operations (CAFOs) during the rendering pause, is no longer applicable.

Farms regulated under the CAFO general permit

The temporary allowance for CAFOs to bury livestock mortalities has ended. Farms regulated by the CAFO general permit should follow the requirements laid out in the permit. This includes:

- Dead animals shall be properly disposed of within three days. The disposal of animal mortalities in stormwater or any liquid manure or process wastewater treatment systems is prohibited.
- Adhere to the NRCS Standard for an Animal Mortality Facility (NRCS-NY 316) which allows for composting, incineration or refrigeration; and/or
- Follow the guidance from Cornell Waste Management Institute’s recommendations: Composting Animal Mortalities.

For catastrophic emergency mortality management scenarios, such as after a facility fire, other options remain via the NRCS-NY 368 Emergency Animal Mortality Management Standard.

Composting

“Composting provides an alternative to traditional carcass disposal as it can be less expensive, is self-sufficient, and is biosecure. The temperatures achieved through the composting process may eliminate or greatly reduce pathogens, hindering the spread of disease. Research continues to demonstrate effective destruction of nearly all livestock diseases of concern. Properly composted material is environmentally safe and a useful soil amendment” (Bonhotal, 2014). For non-CAFO farms, you may compost mortalities onsite without a permit using 2014 Cornell Waste Management Institute recommendations. Under State law, no more than five tons of carcasses can be from off-site sources and the animal carcasses must be placed within the compost pile on the day received (6 NYCRR Part 361-3.2(a)(4)). To handle more than five tons of off-site animals (up to 1,000 large animal equivalents), the farm must obtain a solid waste management facility registration under 6 NYCRR Part 361-3.2(b)(3). The registration forms and more information on organic waste management can be found on the DEC’s Organics Recycling Facilities and Regulations website page.

Burial

Farms not regulated by a CAFO permit can choose to bury dead animals on farm, but shall follow the guidelines required by the updated NYDEC Solid Waste rules NYCCR-NY 363-2.1(b):

1. The animal carcass must be buried within 72 hours of death, unless a longer period is approved by the department;
2. The burial pit must not be located in a special flood hazard area, and must be 200 feet from the property line, a residence (excluding the farmer’s residence), a potable water well, a surface water body, and a state or federally-regulated wetland;
3. The base of the burial pit must be at least two feet above seasonal high groundwater, four feet above bedrock or other confining layer, and the underlying soil must not exceed a permeability of one inch per hour;
4. A maximum of three large animal carcasses (bovine, equine, etc.) are allowed in one pit. For small animals, a maximum depth of three foot of small animal carcasses in a 10 foot by 10 foot area burial pit is allowed;
5. A minimum of 10 feet of undisturbed soil is required between burial pits and no more than 50 large animal carcasses (or equivalent) are allowed per acre;
6. For mass mortalities caused by barn fires or other similar incidents, trenches may be allowed in lieu of the pits described in paragraphs 363-2.1(b)(4) and (5) of this Part, as determined by the department;
7. A minimum of one foot depth of absorbent natural material (sawdust, straw, bedding (other than sand), etc.) must be placed under the carcass and extend at least six inches around the carcass, unless the soils present are sufficiently impermeable, as determined by the department;
8. At least three feet of soil must be placed above the carcass. A finished grade that is slightly above natural ground elevation, to accommodate settling and reduce ponding from precipitation, is required. The surface must also be vegetated to minimize run-off;
9. Run-off must be directed away from the pit(s);
10. A pit cannot be reused unless the prior mortality has undergone complete tissue degradation;
11. The animals do not emanate from research or are otherwise subject to regulation under Part 365 of this Title.

Animal health best practices
NYSAGM strongly recommends the following precautions:
• Be decisive when it’s time to cull an animal. Make the decision early while the cow is still marketable.
• If chemical euthanasia is used to dispatch an animal on the farm, the option for composting might be restricted due to chemical exposure to birds of prey, scavengers and neighbors’ free-roaming dogs. You must take precautions to be sure that dogs, cats, and wildlife cannot gain access to the animals being composted.
• Do not delay burial or enclosure in a composting bed. The longer you wait, the more difficult the carcass will be to handle and the chances of spreading disease will increase.

References


For more information
• For questions about Solid Waste rules and regulations, contact Sally Rowland, NYSDEC – Division of Materials Management at sally.rowland@dec.ny.gov
• For questions about CAFO permit and associated requirements, contact Sara Latessa, NYSDEC – Division of Water at sara.latessa@dec.ny.gov
• For questions about composting, contact Jean Bonhotal, Cornell Waste Management Institute at cwmi@cornell.edu or visit cwmi.css.cornell.edu/mortality.htm
• For questions related to nutrient management and CAFO compliance, contact Kirsten Workman, Cornell PRO-DAIRY at kw566@cornell.edu or 607-255-4890