

## Nutrient Management

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### **Livestock Mortality Management**

#### **Updated Solid Waste Rules outline requirements for burial of livestock/poultry mortalities and clarification for CAFOs**

Kirsten Workman, Sally Rowland, Sara Latessa and Greg Albrecht

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 to clarify the allowable options for Concentrated Animal Feeding Operations (CAFOs).

#### **Farms regulated under the CAFO general permit**

The New York State CAFO permit requires that permitted farms follow NRCS standards. The standard for an Animal Mortality Facility ([NRCS-NY 316](#)) focuses on nutrient recycling, specifically composting and incineration. The standard does not specifically prohibit burial however, it requires compliance with all federal, state, and local laws. With that in mind, and the newly established burial criteria put in place by DEC's Division of Material Management (DMM), NYSDEC will accept burial on CAFO's if DMM burial criteria outlined in [NYCRR-NY 363-2.1\(b\)](#) is met.

Farms regulated by the CAFO general permit should follow the requirements laid out in the [permit](#).

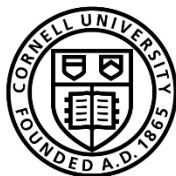
- Dead animals shall be properly disposed of within three days. The disposal of animal mortalities in stormwater or any liquid manure or process wastewater treatment systems is prohibited.
- Adhere to the NRCS Standard for an Animal Mortality Facility ([NRCS-NY 316](#)) which has specific considerations 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.*

In all cases, it is important to continually assess existing management and base future practices or changes in operation and maintenance on site conditions (soils, proximity to water courses, topography, available area, etc.), best estimates of annual animal mortalities by group or weight, and management.

#### **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](#)). Farms may compost mortalities onsite without a DMM 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 can be found on the [DEC Organics Recycling Facilities and Regulations webpage](#).

## **Burial**

Farms can choose to bury dead animals on farm, but shall follow the requirements of the updated NYDEC Solid Waste rules [NYCRR-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 feet 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

NYSAGM Mortality Guidance:

[agriculture.ny.gov/system/files/documents/2023/10/mortalityguidance\\_0.pdf](https://agriculture.ny.gov/system/files/documents/2023/10/mortalityguidance_0.pdf)

Bonhotal, Jean, Mary Schwarz and Robert Rynk. *Composting Animal Mortalities*. Cornell Waste Management Institute, 2014. [hdl.handle.net/1813/37369](https://hdl.handle.net/1813/37369)

NYSDEC Solid Waste Organics Management for Farmers: [dec.ny.gov/environmental-protection/recycling-composting/organic-materials-management/farms](https://dec.ny.gov/environmental-protection/recycling-composting/organic-materials-management/farms)

## 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](mailto: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](mailto:sara.latessa@dec.ny.gov)
- For questions about composting, contact **Jean Bonhotal, Cornell Waste Management Institute** at [cwmi@cornell.edu](mailto:cwmi@cornell.edu) or visit [cwmi.css.cornell.edu/mortality.htm](https://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](mailto:kw566@cornell.edu) or 607-255-4890