

INCINERATION: Incineration is convenient, especially for smaller animals, but can be expensive and may create odors. Agricultural operations are currently exempt from air quality regulations on the premises of the farm operation unless the federal Environmental Protection Agency (EPA) says otherwise. Local municipalities have authority to regulate air quality. **Check your local ordinance before incineration.**

Incineration is not the same as open air burning. Open air burning is not a legal way of dead stock disposal.

Incineration requires a special unit specifically designed for that purpose. The best incinerators have the burner above the animal(s) or are fitted with a flue after-burner to eliminate smoke.

NEIGHBOR AND NUISANCE ISSUES

As non-farm residents are moving closer to and are more mindful of agricultural operations, even legal disposal methods can become an issue if you do not consider the impact on your neighbors.



Photo courtesy of Lancaster Farming Newspaper. Lancaster County 2007.

Odors associated with agriculture are often the root of many conflicts or complaints. **Did you know that people smell with their eyes?** A cleaner, neater farm will usually generate fewer complaints about odors than a poorly managed facility that appears messy. It is best to keep a visual screen such as tree buffers around farm buildings, burial holes, incinerators and mortality disposal facilities in order to minimize complaints.

It is also a good neighbor practice to make sure mortality composting or burial sites have at least the required two (2) feet of cover. This prevents bio-security hazards for you and your neighbors, such as a neighbor's dog carrying portions of dead animals back to your neighbor's porch, and prevents the vultures from circling.

CATASTROPHIC MORTALITY

The information and techniques outlined in this brochure are intended as guidance for routine animal mortalities on your farm. In situations involving catastrophic mortality losses, such as whole herd or flock disposal due to disease or catastrophic events, please contact the PA Department of Agriculture Bureau of Animal Health and Diagnostic Services at 717-772-2852 for additional information and instructions.

ADDITIONAL RESOURCES

Contact your local Penn State Extension, County Conservation District or USDA Natural Resources Conservation Service offices.

Natural Rendering: Composting Livestock Mortality and Butcher Waste. Cornell Waste Management Institute. 2002

607-255-1187

<http://compost.css.cornell.edu/NaturalRenderingFS.pdf>

Penn State Extension Composting Page
<http://composting.cas.psu.edu>

Pennsylvania Agricultural Ombudsman Program
717-880-0848 or 814-696-0877, ext. 113
www.agombudsman.com

Pennsylvania Department of Agriculture
717-787-4737
www.agriculture.state.pa.us

Pennsylvania USDA Natural Resources Conservation Service (NRCS)
717-237-2117
www.pa.nrcs.usda.gov

Penn State Extension
www.extension.psu.edu

PA Department of Environmental Protection
www.depweb.state.pa.us Scroll down to "In Your Neighborhood" for DEP offices in your area.

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Livestock & Poultry MORTALITY DISPOSAL *in Pennsylvania*



Properly **managing** and **disposing** of dead farm animals is important. Every livestock and poultry operation should have a strategy for properly disposing of dead stock. The strategy must follow a legal disposal method as defined in the PA Domestic Animal Act. The four legal methods of disposal are mortality composting, rendering, incineration and burial.

DISPOSAL STRATEGY

A disposal strategy must consider practical aspects of animal disposal. Are the farm soils suitable for burial? Take depth to bedrock, seasonally high water tables, proximity to wells and surface water, etc. into account. Do you have heavy equipment for burying large dead stock?

Consider neighbor relations and nuisances that may be created by your chosen disposal method. While mortality composting is a desirable option for many producers, placing a composting pile or bin too close to a neighbor can turn it into a new liability.

What is the potential impact a disposal method may have on your herd or flock's health, safety and bio-security?

Disposal of animals on top of the ground, and uncovered, hoping they will be eaten or decompose, is not legal nor professional.

PA DOMESTIC ANIMAL ACT

The PA Domestic Animal Act lists important legal requirements for all poultry and livestock operations. Responsible parties must:

- Properly dispose of the carcass within **48 hours** after a domestic animal dies.
- Prevent exposure of the carcass to other living animals, domestic animals and the public.
- Not endanger environmental, animal or public health while transporting dead stock.
- Be licensed by the PA Department of Agriculture if you purchase or receive a dead domestic animal for disposal purposes.

LEGAL DISPOSAL METHODS

It is critical to the success of any legal disposal option that livestock or poultry operations follow proper methods and account for specific characteristics of a site.

MORTALITY COMPOSTING: When managed properly, composting is convenient, affordable and requires minimal labor. Properly managed composting facilities do not have problems from rodents, predators, flies or odors.

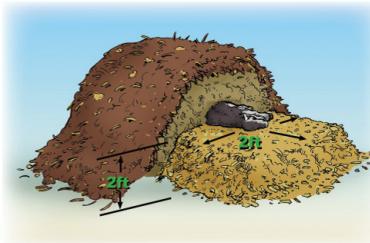


Illustration by Bill Davis, courtesy of the Cornell Waste Management Institute.

Composting is the microbial breakdown of organic matter to a more stable material and requires a proper "carbon to nitrogen" ratio. For **smaller animals**, such as poultry, pigs and sheep, a properly constructed covered structure is recommended. For a few **larger animals**, such as cattle and horses, a freestanding pile on a well-drained or improved surface is adequate. More composting information can be found at <http://cwmi.css.cornell.edu/composting> and <http://composting.cas.psu.edu> or contact your local Penn State Extension office.

RENDERING:

Rendering, where available, is convenient and requires minimal labor. It can be expensive and have biosecurity concerns. Rendering pick-up should be located in an area away from the main animal housing. Dead animals should not be visible to the general public.

Due to changes in federal regulations, some rendering companies may no longer accept dead livestock. Call the renderer for more information.

BURIAL: Burial has the greatest number of environmental, public health and safety considerations. Burial sites need to be chosen carefully to prevent groundwater and well water contamination. Adequate cover prevents wild animals, dogs or birds from exhuming the carcasses. Poor coverage of carcasses can spread disease, be unsightly and can attract rodents and flies.

Burial requires equipment to lift large animals and dig deep enough holes. Lance the rumen of animals over 100 pounds for easier decomposition.



By law, burial sites **must** be:

- Located outside of the 100-yr flood plain
- A minimum of 100 feet from waters of the Commonwealth (streams, ponds, wetlands, etc.) (200 feet is recommended)
- Covered with minimum 2 feet of soil within 48 hours

Burial sites **should** be:

- Located minimum 100 feet from wells & sinkholes (200 feet recommended)
- At least 100 feet from property lines (200 feet recommended)
- Away from public view

Bottom of burial sites **should** be:

- At least 2 feet above bedrock
- At least 2 feet above seasonal high water table
- At least 2 feet above highly permeable soils

Identify sites on maps or in GPS for future reference. Re-vegetate with grass once the burial site is closed.

Farmers are encouraged to seek technical assistance from a local County Conservation District, Extension, or USDA Natural Resources Conservation Service (NRCS) office to help determine the best burial site(s) on the farm.