



Catastrophic Livestock and Poultry Carcass Disposal

Bobby Clark, Virginia Cooperative Extension
Gary Flory, Virginia Department of Environmental Quality
Bob Peer, Virginia Department of Environmental Quality
Dr. Dan Hadacek, Virginia Department of Agriculture & Consumer Services
Scott Greiner, Virginia Tech

This guide is intended to assist Virginia's farmers in understanding their mortality disposal options during natural disasters and **non-infectious** disease events. Blizzards, tornadoes, extreme heat, and floods are just a few examples of the severe weather events that may result in significant losses to farm animal populations. Animal losses often cause significant financial losses to the farmers who rely on the income from these animals. Compounding the financial impact of these animal losses is the burden of responsibly disposing of the resulting animal carcasses. Improperly managed, animal carcasses have the potential to spread disease and contaminate surface and groundwater supplies.

The most appropriate disposal option for an individual farmer depends on a number of factors, including the number of animals lost, current routine mortality disposal method, presence of an appropriate on-site composting site, and current rendering and landfill capacity.

Information on the disposal of routine on-farm mortalities is available from the Department of Environmental Quality (DEQ)ⁱ and Virginia Cooperative Extension (VCE)ⁱⁱ. Prior to disposal, all non-routine animal losses (i.e. unknown disease, unusual symptoms or increased mortality that cannot be explained) should be reported to your veterinarian or to the Virginia Department of Agriculture and Consumer Services (VDACS 804-786-2483).



Catastrophic Option 1:

Composting mortality within an existing structure such as a commodity shed or poultry litter storage building can often be an effective and affordable disposal option. Composting within a structure minimizes environmental impacts and the disturbance of the carcasses by domestic or wild animals. Care should be taken to minimize contact between the compost pile and wooden portions of the structure. Composting can be accomplished by placing alternating layers of a carbon material such as wood chips or shavings and animal carcasses. If requested, DEQ or VCE can provide technical assistance with the composting process (see reference section for recommended publications). Woodchips are often available at the local landfill.

Catastrophic Option 2:

If composting inside a structure is not practical, farmers can contact DEQ for assistance in locating an appropriate on-farm composting site. Technical assistance for the construction of compost piles is available from DEQ and VCE.

Catastrophic Option 3:

Rendering facilities may be available for the disposal of poultry, cattle less than 30 months in age, and other livestock. Valley Proteins, Inc. (540-877-2590) operates three rendering facilities in Virginia including plants in Linville, Emporia, and Winchester. Poultry mortality must be received at the rendering facility within 18 hours of loss. Regardless of the animal type, farmers should disinfect their vehicles at the disinfection station prior to leaving the facility. Prior to transporting carcasses to the rendering facility, farmers should check with the rendering plant to confirm that capacity is available.

Catastrophic Option 4:

Farmers may be able to take animal carcasses to a permitted commercial composting facility. Prior to transporting carcasses, farmers should contact the facility to make sure they can accept them.

Catastrophic Option 5:

Local and regional landfills may be able to accept animal carcasses. Carcasses must be transported in a manner that does not result in fluid leaks during transport. Landfills should be contacted prior to delivering the carcass to the landfill. In some cases, landfills may need to request approval to accept carcasses from DEQ. In this case, landfill operators should contact their local DEQ office.

Catastrophic Option 6:

Incineration is a viable disposal option. Incinerators utilize an energy source such as propane gas, LP gas, or diesel fuel with forced air in a combustion chamber(s) to reduce animal mortalities to ashes. When properly operated, incinerators prevent the emission of objectionable odors and excessive amounts of particulate matter. *Air permits must be obtained for all incinerators, except poultry and swine incinerators as described in 9 VAC 5-80-1105 B.15, from DEQ to install and operate in Virginia (there are specific design and operation standards that need to be met prior to being approved).* Cost and permitting

For additional information, contact:

Bobby Clark, Virginia Cooperative Extension, raclark@vt.edu, 540-459-6140 or 540-333-3227.

Gary Flory, Virginia Department of Environmental Quality, gary.flory@deq.virginia.gov, 540-574-7840.

Bob Peer, Virginia Department of Environmental Quality, robert.peer@deq.virginia.gov, 540-574-7866.

Dr. Dan Hadacek, Virginia Department of Agriculture & Consumer Services, dan.hadacek@vdacs.virginia.gov
540-209-9120

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References:

On-Site Composting of Routine Animal Mortality

http://www.deq.virginia.gov/Portals/0/DEQ/Water/VirginiaPollutionAbatement/AGMortalityGuidance/2009-02_On_Farm_Animal_Composting.pdf

Incineration Regulations

<http://www.deq.virginia.gov/Portals/0/DEQ/Air/Regulations/806.pdf>

On-Site Burial of Routine Animal Mortality

http://www.deq.virginia.gov/Portals/0/DEQ/Water/VirginiaPollutionAbatement/AGMortalityGuidance/2009-03_On_Farm_Animal_Burial.pdf

On Farm Composting

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

The following links are to USDA Guidance Documents for managing catastrophic livestock mortality in disease situations. Some of these principals apply to non-infectious situations.

https://www.aphis.usda.gov/animal_health/emergency_management/downloads/nahems_guidelines/livestock-mortality-compost-sop.pdf

https://www.aphis.usda.gov/animal_health/emergency_management/downloads/hpai/mortalitycompostingprotocol.pdf

requirements make incineration expensive and likely not viable in most instances.

Unacceptable Disposal Methods:

Through the years many farming practices have evolved. The disposal of animal carcasses is no exception. Some practices that were routine 20 years ago are no longer acceptable due to disease transmission or environmental concerns.

Practices to Avoid Include:

- Dragging carcasses to a bone yard or to the woods;
- Digging a trench and burying large numbers of carcasses (DEQ guidance limits On-Site Burial to no more than 2,000 pounds of dead animals on any given acre per year and is only intended for routine mortality);
- Burying carcasses near wells, surface water, or in areas with shallow groundwater (see the reference section for information on burial of routine animal mortality);
- Placing animals on top of a brush pile and burning;
- Dumping carcasses in streams, rivers or manure pits; or
- Allowing animals to decompose where they died.