



Disposal Options for Large Quantities of Dead Animals Technical Guidance Document SW-2001-G1

This document describes acceptable practices for the disposal of large quantities of dead animals (six or more animal units as defined in KSA 65-171d). Disposal options for small quantities of dead animals are described in technical guidance document SW-1994-G1.

Background

Large numbers of livestock may be killed during a disease outbreak or natural disaster. These mortalities require special disposal procedures to prevent creating hazards to human health, animal health, and the environment.

Disposal Options

The Bureau of Waste Management (BWM), along with the Animal Health Commissioner - Kansas Department of Agriculture, Division of Animal Health (785-564-6601), will provide advice on disposal options which meet the requirements of K.S.A. 47-1219 and K.S.A. 65-3407c(a)(5).

The statutory options for disposal, in order of preference, are:

1. Rendering;
2. Composting;
3. Disposal at a municipal solid waste landfill;
4. Burial on-site; and
5. Incineration or open burning.

Rendering is the preferred disposal option for large quantities of dead animals; however, very large quantities of animals or animals with an infectious disease may nullify this option.

Composting may be a disposal option for large numbers of dead animals. If animal mortalities resulted from a disease, contact BWM (785-296-1600) for guidance on the appropriateness of composting.

Disposal at a permitted municipal solid waste landfill is the third preferred option. This type of facility is constructed to safely dispose of organic wastes. However, very large quantities of animals and/or long transport distances may make this option impractical.

Burial on-site requires authorization from the Kansas Department of Health and Environment (KDHE). This method may be used for the disposal of whole unprocessed livestock at a location near where the animals died if the deaths were the result of a natural disaster or if the carcasses present an emergency situation (K.S.A. 65-3407c(a)(5)).

A request for on-site disposal must be submitted to BWM on a *Disposal of Solid Waste Without a Permit* (Disposal of Whole Unprocessed Livestock Carcasses) authorization application, which includes written approval from the landowner and from the local government or zoning authority. The form may be downloaded from the BWM website at www.kdheks.gov/waste/.

The following guidelines should be followed when burying large quantities of dead animals on-site:

- With the help of KDHE District Office staff, select a site that will be protective of groundwater and surface water. Contact information for each district office may be found on the KDHE Environmental Field Services website at www.kdheks.gov/befs/index.html.

- Bury animals within 48 hours unless otherwise authorized.
- Add quick or slaked lime, if necessary, to control odors and thus discourage scavenging.
- Cover animals with a minimum of three feet of soil.

Incineration or open burning may be required by the Animal Health Commissioner to prevent disease transmission. In which case, KDHE’s Bureau of Air (785- 296-1542) must be consulted for approval of location and methods of combustion.

Disposal Considerations

The following table, modified from United States Department of Agriculture, Animal and Plant Health Inspection Service information, indicates the areas of concern that should be considered when determining which disposal method is the best option.

To use this table, decide on the disposal method that is most suited to your situation and then look down the column under the selected disposal method at the letters “X”, “R”, and “K” to determine which areas of concern apply to that disposal method.

You will need to be sure that all applicable areas of concern have been considered and that appropriate controls are in place to minimize the impacts of the selected disposal method on these areas of concern.

Area of Concern	Method			
	Rendering	Composting	Burial	Incineration or Open Burning
Surface Water	X, R	X, K	X, K	
Groundwater		X, K	X, K	
Air	X, R	X	X	X, R, K
Wildlife			X	
Public Safety and Worker Health	X		X	X
Solid Waste		X, K	X, K	X
Vegetation			X	X
Cultural and Historical			X	X
Utilities			X	X
Climate		X	X	X

X – denotes applicability.

R – denotes all Federal, State, and local discharge permit requirements must be satisfied in order to mitigate or eliminate any impacts.

K – denotes KDHE has specific regulations which must be met.

For additional information regarding the proper management of solid or hazardous waste in Kansas, you may visit the Bureau of Waste Management website at www.kdheks.gov/waste/ or contact the Bureau at: (785) 296-1600, bwm_web@kdheks.gov, or the address at the top of this document.