

Livestock Waste Management Section
Policy Memorandum 19-3
June 5, 2019

Subject: Mortality Handling for KDHE Permitted Livestock Facilities

Livestock mortalities as the result of normal population losses or disasters shall be disposed in accordance with K.S.A. 47-1219 including burial, incineration, rendering, landfilling, or composting. Livestock mortality carcasses at a KDHE permitted livestock facility are considered a "process waste" (K.A.R. 28-18-1 (hh)) allowing for the use of "animal waste management system(s)" to collect, contain, store, distribute, land apply, or dispose of the carcasses generated (K.A.R. 28-18-1 (c) and (hh)). The two primary systems for carcass handling are burial and composting. "Land application" in the form of mesophilic static pile composting provides a third system for carcass disposal along with utilization of carcass nutrient content for crop production (K.A.R. 28-18-1 (u); Flory and Peer, 2017).

Prior to utilization of animal waste management systems for the handling of facility generated carcasses the system design and operational plan along with either a Waste Management Plan or Nutrient Management Plan must be submitted to KDHE for review and approval. Design and operational plans meeting applicable statutes, regulations, and minimum design standards and approved by KDHE staff will be submitted for draft permit review during Public Notice. Following public notice and the response to any public comments a new facility permit is issued authorizing the facility construction and use of their animal waste management system for the handling of facility generated mortalities.

Minimum Standards of Design, Construction, and Maintenance for Animal Waste Management Systems Handling Livestock Carcasses

Burial and Land Application Site Location:

- Separation distances
 - at least 500 feet from habitable structures
 - at least 1,000 feet from primary highways
 - at least 500 feet from secondary highways
 - at least 300 feet from any other road.
- Located outside of 100-year floodplain
- Located in relatively flat area (less than 2% slopes)
- Soils rated as "Not Limited" for Catastrophic Animal Burial (DHS and USDA)
- Located outside of Sensitive Groundwater Area
- Located outside of Equus Beds
- Not located in frequently or occasionally flooded soils without adequate flood protection measures
- 1,000 feet from public water supply
- 500 feet from ground and surface water conduits (wells, creeks, channels, springs, etc)

Burial Excavation System Areas:

- Excavation with depths greater than 5 feet must have side slopes of 1.5 (horizontal) to 1.0 (vertical)
- Excavation with depths less than 5 feet shall utilize a step on bench 18 in wide and 1 feet deep to around the excavation perimeter so that the remain excavation wall is 4 feet or less.
- Maximum excavation depth of 8 feet.
- Excavation perimeter fencing required to prevent carcass removal by vectors and entrance by unauthorized persons and vehicles.

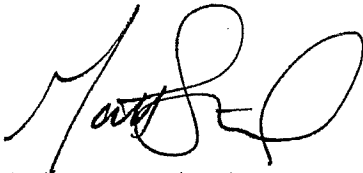
Land Application System Areas:

- Minimum cover slopes of 3:1
- Minimum groundwater separation distance of 20 feet measured from the bottom of the excavation.
- Operation methodology as specified by *Flory, Greg and Robert Peer. Mesophilic State Pile Composting of Animal Carcasses. BioCycle. Vol. 58, No. 3, p. 65.*

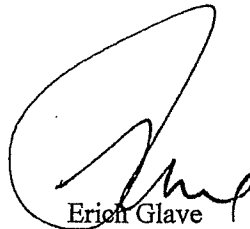
Mortality Handling Operational Records:

- Site specific benchmark for trench and burial location identification
- Operational log recording date, location, and quantity of each burial

This policy memorandum and the Kansas Agricultural and Related Waste Control / NPDES Permit does not relieve the applicant and facility from complying with other federal, state, or local requirements which may apply.



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