Animal Carcass Disposal Options in Tennessee

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Forbes Walker & Shawn Hawkins
Biosystems Engineering and Soil Science
Overview

• Tennessee Department of Agriculture Policy
• Options
  - On-farm burial
  - Composting
  - Landfilling
  - Open Burning
  - Incineration
  - Catastrophic losses
• UT Extension Demonstrations
This is an Important Issue

• Farm animals inevitably die

• Disposal options are dwindling
  – Horse slaughter prohibition
  – Downer cow prohibition
  – Cattle material prohibited in animal feed
  – Rendering is no longer an option

• CAFO Inspections/News Headlines
Photos Taken During EPA CAFO Inspections
Defining Proper Disposal

• Improper disposal
  – Dumping: sinkholes, creeks, ditches
  – Dragging them off to the “bone yard”
  – Using them for coyote bait

• Proper disposal avoids
  – Endangering human/livestock health
  – Pollution
  – Nuisance odors & cruelty allegations
  – Occurs within 48 hrs
TDA Policy - Purpose

- Death of farm animals is a normal and inevitable part of livestock productions

- Concerns:
  - Human health
  - Public nuisance
  - Environmental

- Carcasses are “solid waste”

- Disposal within 48 hours “recommended”

- Notify State Vet (TDA) for losses >10,000 lbs
On-Farm Burial

- No Permit is needed (< 1 acre disturbance)
- Choose a Good Site:
  - 300’ up-gradient/150’ down-gradient well
  - 165’ from property line or public use area
  - 100’ from water body, stream or drainage
  - No closer than 2’ from bedrock or seasonal high water table
  - In soils with permeability less than 2” per hour
Composting

• Windrows
  - Smaller animals
  - Base 6 feet wide x 3 feet high
  - Layer with bulking materials – wood chips, sawdust, poultry litter etc.

• Hay bale bins
  - 2 bales x 3 bales
  - Alternating layers of carcasses and bulking materials

• Static Piles
  - Alternating layers of carcasses and bulking materials
Static Pile Composting

• No permit required
  – Conduct on-farm
  – Compost used on-farm

• Guidelines
  – Base of 2 ft carbon additive
  – Place one carcass
  – Cover with 2 ft carbon additive
  – Separate carcasses by 2 ft
  – Optional turn when “release” occurs
Composting Challenges

- Geology
- Ground water
- Leachate runoff
- Vermin
- Recipe
- Bulking material
- Bones!
Landfilling

- **W252 Survey**
  - Green Squares: readily accept
  - Yellow Diamonds: accept with restrictions
  - Brown Circles: do not accept
Landfilling

• County, Name, Phone Number of all 35 Class I TN Landfills in W251

• Practical advice
  – Call ahead and bring early
  – Cover the animal during transportation
  – Have disposable rope already tied to the carcass
Incineration

TDEC Air Pollution Control Rules provide exception to permit if:

- Not greater than 500 lbs per hour capacity
- Burner < 400,000 BTU/hr
- Incinerator is only used for carcasses
Open Burning

TDEC Regulations

- Burning with no smoke stack present
  • on-ground, in pits, in barrels or tanks
  • only on site vegetation & wood waste
- Prime with #1 and #2 fuel oil, vegetation grown on burn site and wood waste
- Only allowed for dead animals when no other safe and/or practical disposal method exists (catastrophic event?)
- NO plastics, treated wood, tires, etc.
Rendering

• Rendering companies no longer provide pickup services for farms
• Drop-off?
  - Griffin Industries: Memphis, Chattanooga, Madison, Knoxville, Pulaski
  - Valley Proteins: Knoxville
  - Dar-Pro: Union City
  - Alabama Hide & Tallow: Huntsville, AL
Other Options – Available in Other States

• Natural decomposition (ID, LA, OR)
• Digestion (GA, ID, LA)
• Extrusion (AR, GA, KY, MN, WV)
• Feeding to alligators or fur animals (AR, GA, IN, MN, MS)
• Lactic fermentation (MN, PA)
• Gasification (NC)
Summary

• Use common sense!
• Out of sight
• Timely manner
• Manage problems; odor, leachate, vermin, bones
Mortality Management Factsheets

1. An overview of the state guidelines on mortality management
2. Overview of landfilling options
3. Burial
4. Composting
5. Mortality management for cattle owners
6. Mortality management for horses
7. Mortality management for small ruminants
"The only things certain in life are death and taxes"
Benjamin Franklin