Carcass Disposal
On-Site Burial

On-Site Burial
- Excavated trench or pit
  - Decomposition
  - Heat
- Length of time required varies
  - Species and size
  - Total volume
  - Soil characteristics
- Settlement of the burial site
  - Additional backfill

Burial Types
- Trench burial
  - Daily mortalities
  - Trapezoid or vertical pits
  - Inexpensive
  - Convenient
- Mass burial
  - Large numbers of animal mortalities
  - Trapezoid pits with liners
  - More expensive and time consuming

Site Selection
- Soil properties
  - Texture and permeability
- Construction of the site
  - Slope of land
  - Depth of water table and bedrock
- Location of the site
  - Proximity to water sources or public areas
  - Accessibility
- Projected future use of the site

Construction and Design
- Site size/area
  - Depends on species, age/size, quantity
- Trapezoid shape pits
  - 42 cubic feet per:
    - 1 adult bovine OR
    - 5 pigs/sheep OR
    - 40 chickens
- Liners to minimize seepage
- Caution during excavation

- Trench size
  - 4-8 feet deep
  - 6 feet wide
  - Two large carcasses side by side
- May include liners
  - Clay may be used as a base layer
- Vent large carcasses
- Settlement during decomposition
  - May need additional backfill
Environmental Impacts

- Air quality
  - Odor
- Water quality
  - Leachate
- Gases
  - Methane, carbon dioxide, hydrogen sulfide
- Scavengers

Comparison With Other Disposal Methods

- Advantages
  - Quick, easy, inexpensive
  - Equipment generally readily available
  - On-site; limited transportation
- Disadvantages
  - Large areas of land
  - Difficult in wet and cold weather conditions
  - Environmental impacts
  - Public opposition

Regulations and Monitoring

- Consult State regulations
  - Sites highly regulated
  - Depth, width, length, max size
- Environmental impact
  - Groundwater monitoring
  - Surface water sources
  - Air quality/odor
- Record site GPS location

Biosecurity

- Biosecurity
  - Personal protective equipment (PPE)
  - Movement control
  - Cleaning and disinfection
- Site security
  - Unauthorized persons
  - Log book
  - Warning or restriction signs
  - Site security personnel

Personnel Safety

- Safety Issues
  - Physical demands
    - Long hours
    - Response activities
  - Psychological impact
- Weather conditions

Resources for Carcass Disposal

- USDA Foreign Animal Disease Preparedness (FAD PReP) Guidelines: Disposal
- Carcass Disposal: A Comprehensive Review. USDA and Kansas State University
  - https://krex.k-state.edu/dspace/handle/2097/662
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