




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



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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



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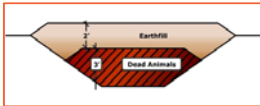
Site Selection

- 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

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Construction and Design

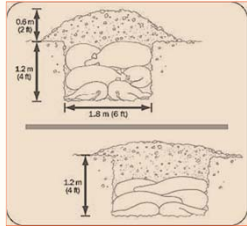
- Site size/area
 - Depends on species, age/size, quantity
- Trapezoid shape pits
 - 42 cubic feet per:
 - 1 adult bovine OR
 - 5 pigs/sheep OR
 - 40 chickens
- Liners to minimize seepage
- Caution during excavation



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Construction and Design


- 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



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Environmental Impacts

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



The diagram illustrates a cross-section of a land disposal site. On the left, a 'Leaking Land Disposal Site' is shown with red dots representing contaminants. A 'Contaminated Well' is drilled into this area. To its right is an 'Uncontaminated Well'. A blue arrow labeled 'Groundwater Flow' points from the contaminated well towards the uncontaminated well. Further right, a 'Groundwater Discharge into Stream' is shown where the water is being released into a body of water.

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Comparison With Other Disposal Methods

<ul style="list-style-type: none"> ● Advantages <ul style="list-style-type: none"> – Quick, easy, inexpensive – Equipment generally readily – On-site; limited transportation 	<ul style="list-style-type: none"> ● Disadvantages <ul style="list-style-type: none"> – Large areas of land – Difficult in wet and cold weather conditions – Environmental impacts – Public opposition
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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

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Biosecurity

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



The sign is a red circle with a white border. Inside the circle, the text reads 'PLEASE, DO NOT ENTER WITHOUT PERMISSION' in white capital letters. In the center of the circle is a white silhouette of a cow's head and neck.

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Personnel Safety

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

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Resources for Carcass Disposal

- USDA Foreign Animal Disease Preparedness (FAD PREP) Guidelines: Disposal
 - http://www.aphis.usda.gov/animal_health/emrs/nahems.shtml
- Carcass Disposal: A Comprehensive Review. USDA and Kansas State University
 - <https://krex.k-state.edu/dspace/handle/2097/662>

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Acknowledgments

Development of this presentation was by the Center for Food Security and Public Health at Iowa State University through funding from the Multi-State Partnership for Security in Agriculture

Authors: Melissa Lang BS; Glenda Dvorak, DVM, MPH, DACVPM



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