Kansas Requirements for Waste Storage Structure Closure

Our vision is "healthy Kansans living in safe and sustainable environments". The state belongs to all of us - "Kansas Don't Spoil It"

Kansas Waste Storage Structure Closure Regulations
Based on Kansas Statutes 65-171d, 65-1, 189 and 65-1, 190

Non-Swine
- Regulation 28-18-16
  - Waste-retention lagoon or pond closure requirements

Swine
- Regulations 28-18a-22, 28-18a-23 and 28-18a-24
  - Swine facility closure requirements
  - Financial assurance for swine facility closure
  - Financial assurance for swine waste-retention lagoon or pond closure

Closure Plans
Must be approved by the Department prior to permit issuance:
- Swine facility greater than 3,725 animal units
- Any federally permitted facility located over the Equus beds proposing new construction or expansion or is applying for renewal

Must be approved by the Department prior to Closing:
- Any facility which chooses to close a waste storage structure

The archived presentation is available at:
http://www.extension.org/pages/21819/chronological-webcast-archive
Closure Plans

Must include at a minimum:
- Description of all animal waste management system components utilized to contain, control or store process wastes
- Description of the procedures to be used to remove and dispose of process wastes
- Description of the maintenance, deactivation, conversion or demolition of all structures
- Description and detailed drawings for the plugging of groundwater monitoring wells

Earthen Storage Structure Closure Methods

- Removing the berms, grading and revegetating to provide drainage and erosion control
- Leave in place for use as a freshwater pond or reservoir
- Retain for future use as part of an animal waste management system
- Other approved method

After Closure Notification

- Must be closed within 6 months
- Department will document sludge removal
- Department will view sampling activities
- Review sample analysis
- Document all components of closure plan have been completed
- Close permit

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Sampling Strategy

- Composite samples from bottom and sides
- Number of samples depends on size
  - Less than 10,000 square feet
  - 10,000 square feet – 1 acre
  - 1 – 3 acres

Remedial Nutrient Levels

Areas where no vegetation will be present

- Upper 8 inches – 85 mg/kg total nitrate plus ammonia
- Below 8 inches – 40 mg/kg total nitrate plus ammonia

Remedial Nutrient Levels

Areas where vegetation will be present

- Upper 24 inches – 200 mg/kg total nitrate plus ammonia
- Maximum application rate recommended by Kansas State University for the particular crop
- Below 24 inches – 40 mg/kg total nitrate plus ammonia

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Closure Cost Estimates

Varies greatly

- Swine only - $5.71/head to $144.67/head
- Generally about $35 head

Questions

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