2011 Missouri Dairy Grazing Conference

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Regulatory Issues

• State environmental regulatory agency
  – Missouri Department of Natural Resources
  – Water Pollution Control Branch

• Regulatory threshold: 700 dairy animals
  – Required to obtain a permit from MDNR.

• Direct discharge into a stream
  – Regardless of size, regulatory action for a direct discharge (pipe or manmade conveyance).
Regulatory Issues

- Concentrated Animal Feeding Operation Nutrient Management Technical Standard, March 2009
  - Contains the requirements to qualify for the agriculture storm water exemption for the land application fields.
  - Summary of set back distances for the nutrient application.
Technical Issues

• Number and size of animals
  – Regulatory threshold, 700 Dairy Cows

• Percent of manure that will be managed
  – Manure nutrient credit on the grazing area
  – Locations for nutrient application
  – Manure storage system
    • Volume
    • Consistency
Technical Issues

• Milk Center wastewater and manure management
  – Flush system
  – Scrape system

• Winter management area
  – Storm water management
  – Location, location, location!!
Technical Issues

• Storage Structures
  – 180 day storage recommended
  – Liquids
    • Earthen Pits
    • Concrete Tanks or pits
    • Treatment Lagoons (typically anaerobic)
  – Solids
    • Settling Basins
    • Separating devices – screens, wedge wire, etc.
    • Stacking Structure – solids storage
Technical Issues

• **Water Usage**
  – Recycle system from liquid storage
  – Plate cooler water reuse
  – Minimize parlor floor and storm water input

• **Curbing**
  – Push curbs – minimum 24 inches tall
  – Side curbs – minimum 8 inches tall, flushed area may need to be taller.
Technical Issues

• Manure and Wastewater Transfer
  – Consider potential for future additions
  – Adequately sized pipeline – knowledgeable person with pumps and piping
  – Layout concrete lanes for scraping or flushing
    • Minimize corners!
    • Adequate curb height
    • Appropriate slope
  – Land Application System
Environmental Quality Incentives Program (EQIP)
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• Promote agricultural production and forest management
• To optimize environmental benefits
• Authorized in 08 Farm Bill
• Producer must apply – VOLUNTARY!
• Competitive application process – No Guarantee of participation.
Environmental Quality Incentives Program (EQIP)

Eligible producer – person or entity engaged in livestock or crop or forest production

Eligible land – privately-owned cropland or grassland or pastureland or nonindustrial private forestland
Environmental Quality Incentives Program (EQIP)

- Waste Management Systems
  - Manure collection, transport and storage
  - Milking Center wastewater and manure

- Prescribed Grazing System

- Comprehensive Nutrient Management Plan
  - Comply with regulatory requirements contained in Nutrient Management Technical Standard.
**Environmental Quality Incentives Program (EQIP)**

- **Technical Service Providers (TSP)**
  - Private consultants performing activities that comply with NRCS standards and programs
  - Certain EQIP activities are performed only by TSP
- **CNMP plans**
  - Energy Audits
Environmental Quality Incentives Program (EQIP)

Contact your local NRCS Office
- phone book under United States Government, Department of Agriculture
- Missouri NRCS webpage

www.mo.nrcs.usda.gov/programs
Environmental Quality Incentives Program (EQIP)

• NRCS information on social media
  – There is a direct link from the Missouri NRCS website to Twitter
  – Followers will receive timely updates
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