Environmental Quality Incentives Program (EQIP)

Key Practices for Iowa Confined Livestock Operations

Through the Environmental Quality Incentives Program (EQIP), USDA's Natural Resources Conservation Service provides financial and technical assistance to implement conservation practices that address natural resource concerns on private lands. EQIP supports the needs of all agricultural operations, offering ideas, science-based solutions, and guidance for successful and sustainable conservation farms. Below are some of the more popular conservation practices that Iowa farmers install to treat resource concerns related to confined livestock operations as outlined in their conservation plans.

**Waste Storage Facility (Conservation Practice Standard 313)**
A Waste Storage Facility is used to temporarily store waste, such as manure, wastewater, and contaminated runoff. The practice also includes structures such as tanks and holding ponds and can be used where:

- Storage is a component of a planned agricultural waste management system
- It can be constructed, operated and maintained without polluting air or water resources
- Site conditions are suitable for construction of the facility

**Nutrient Management (Conservation Practice Standard 590)**
Nutrient Management addresses the rate, form, timing, and placement of organic and inorganic nutrients. The purpose is to adequately supply soils and plants the nutrients they need to produce food, forage, and fiber and at the same time, minimize nutrient losses from fields and protect surface and ground water supplies. Properly applied, these practices combined with others can:

- Budget, supply, and conserve nutrients for plant production
- Minimize agricultural nonpoint source pollution of surface and groundwater resources
- Use manure or organic by-products as a plant nutrient source
- Protect air quality by reducing odors, nitrogen emissions (ammonia, oxides of nitrogen), and formation of atmospheric particulates
- Maintain and improve physical, chemical, and biological condition of the soil

**Animal Mortality Facility (Conservation Practice Standard 316)**
Animal Mortality Facilities offer an option to treat or dispose of livestock and poultry carcasses for routine (or catastrophic) mortality events on the farm. In Iowa, EQIP funds can be used to build facilities to compost the dead animals. When properly installed and managed, this practice can:

- Reduce impacts to surface and groundwater resources
- Reduce odor issues
- Decrease the spread of disease and pathogens

**Waste Transfer (Conservation Practice Standard 634)**
Waste Transfer is a practice that facilitates movement of waste material, including animal manure, bedding material, spilled feed, process and wash water, and other residues associated with animal production from one location to another for treatment, storage, or on-farm use. Examples of waste transfer practices include:

- Pipe or channel
- Scrape alley
- Reception pit
Waste Separation Facility (Conservation Practice Standard 632)
A Waste Separation Facility is a filtration or screening device, settling tank, settling basin, or a settling channel that separates solids from a liquid waste stream. This practice is a primary treatment process that facilitates other treatments or uses waste products, such as vegetated treatment areas, composting, feed supplement, or bedding. Benefits provided can:

- Improve or protect air quality
- Improve or protect water quality
- Improve or protect animal health
- Meet management objectives

Roof Runoff Structure (Conservation Practice Standard 558)
A Roof Runoff Structure typically includes a gutter system, used as part of an agricultural waste management system that diverts clean water from contaminated areas. This practice can:

- Improve runoff water quality
- Reduce soil erosion
- Minimize volume of contaminated wastewater requiring treatment or storage

Heavy Use Area Protection (Conservation Practice Standard 561)
Heavy Use Area Protection promotes the stabilization of areas frequently and intensively used by people, animals or vehicles by establishing vegetative cover, surfacing with suitable materials, and/or installing needed structures. Examples include feed alleys under a roofed structure or a pad around a livestock watering facility. Properly applied, this practice can:

- Provide a stable, non-eroding surface for areas frequently used by animals, people or vehicles
- Protect and maintain water quality

Windbreak/Shelterbelt Establishment (Conservation Practice Standard 380)
Windbreaks and Shelterbelts are linear plantings of single or multiple rows of trees or shrubs or sets of linear plantings. In conjunction with a confined livestock system, a windbreak can provide the following benefits:

- Improve air quality by reducing and intercepting airborne particulate matter, chemicals, and odors
- Provide living noise screens and visual screens
- Provide shelter for structures or livestock
- Reduce wind speeds in the confined area

Comprehensive Nutrient Management Plan (CNMP)
A CNMP is a plan that groups conservation practices and management activities which, when implemented as part of a conservation system, will help to ensure that both production and natural resource protection goals are achieved. Unique to animal feeding operations, a CNMP incorporates practices that use animal manure and organic by-products as beneficial resources. The CNMP documents the planned agricultural waste management system and addresses these natural resource concerns:

- Soil erosion and soil quality
- Water quality
- Air quality
- Animal health