Planning for Disasters Affecting Manure-Handling Facilities and Lagoons

A farm should be able to handle more manure than it produces and should have a plan to prevent inadvertent spread of manure to illegal areas in a disaster. An example of such local planning is a new program in Missouri. In the Moreau District of the Ozarks local pork producers and the fire department have developed plans and recruited resources to respond to environmental disasters, such as lagoon spills, as well as fires. This type of collaboration is exemplary local planning that will be the backbone of effective disaster mitigation for the livestock industry once it is practiced throughout the country.

Manure-handling facilities and lagoons present significant threats to the environment and wildlife. Many regulations govern the construction and use of manure storage facilities. These regulations apply regardless of whether violations are the result of disasters or not. The following are examples of violations:

- Runoff that is not contained and overflows after heavy rain or snow melt
- Use of stacked manure as a barrier to manure flow (these piles easily break down)
- Overapplication of manure, causing runoff (especially on saturated soils)
- Sump waste
- Rainwater that flows through a cow lane (leading up to a dairy) and off the premises
- Improper irrigation with manure leaking into ditches

Even after natural disasters that block roads and cause power outages, such as floods and blizzards, the operator of the farm remains responsible for the appropriate disposal of manure and other waste from the farm. Disposal systems should be constructed and inspected by professionals to prevent violations in waste handling.



Manure piles and pits should be constructed according to existing laws and regulations. This manure pile is a public health hazard because it is too close to animals and has not been maintained.

Regulations address the distance from the well to the manure storage, distance from livestock facility to the nearest neighbor, days of storage, water table level and storage type when constructing earthen storage, distance to bedrock, and acreage required for spreading manure onto cropland. Failure to comply with regulations can result in fines from the Environmental

Protection Agency and its state equivalent for environmental damages and from the Department of Natural Resources for killing wildlife (e.g., causing a fish kill). Also, under the Federal Clean Water Act of 1972 individuals can sue farm owners for offenses in manure handling if there is evidence of violation.