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Emergency Management for Livestock-waste Disposal

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Livestock waste-storage structures that are currently full pose a management problem and an environmental pollution problem for producers, due to the possibility of a waste discharge. Fields that may normally be available for the proper disposal of stored livestock waste may be wet, flooded, or are otherwise unavailable for the disposal of stored waste.

Now is the time to analyze current livestock waste management systems for needed improvements. *There is a need for a minimum storage volume equal to 6 month's waste production and a recommended storage volume of 1 year's waste production.*

South Dakota state law prohibits the pollution of state waters. National Pollution Discharge Elimination System (NPDES) regulations of the U.S. Environmental Protection Agency (EPA) require the containment of all discharge of a concentrated animal feeding operation, including that of a 25-year, 24-hour storm event.

A concentrated animal feeding operation is an operation where more than 1,000 animal units, or more than 300 animal units with discharge from the feedlot into waters of the state, are confined for more than 45 days during a 12-month period. One animal unit is equal to one 800–1,000 lb feeder steer or heifer, seven-tenths of one dairy cow, or two-and-a-half 55 lb swine.

Feedlot discharge is permissible from storm events larger than the 25-year, 24-hour event,

or from chronic stormy, wet weather. However, there are no public standards by the EPA or the South Dakota Department of Environment and Natural Resources (DENR) pertaining to any discharge due to chronic wet weather conditions.

Livestock producers whose waste storage structures are becoming filled should contact the DENR for regulatory information about an impending discharge or acceptable alternative waste storage.

Disposal Don'ts

Do not dispose of livestock wastes in the following locations:

- roadside ditches
- drainage ditches
- conservation waterways
- streams, creeks, rivers, or lakes

If the amount of land under a producer's control is inadequate for the proper disposal of his waste supply, then an alternative source might be neighbors' fields. In all cases, observe best management practices for the disposal of livestock wastes. Proper application rates and soil compaction are of particular importance.

Temporary storage might be provided by a plastic-lined sandbagged area or holding pond. Abandoned livestock waste-storage structures also could be used for temporary storage, if they

have no major structural deficiencies. Manure solids might be temporarily stored at the perimeter of fields, with any seepage being contained by a berm.

Construct temporary storage away from surface-water supplies and abandoned wells or cisterns, sink holes, or other fissures that connect to groundwater supplies. Be sure any temporary waste storage facilities are approved by the DENR.

Disposal Alternatives

Potential alternative disposal sites:

- alfalfa fields
- idle pastures
- with SCS approval, Conservation Reserve Program (CRP) land

- **USE CAUTION when emptying below-grade waste-storage structures.** Empty rectangular-shaped structures slowly, and maybe only partially, so the increased hydraulic pressure of saturated soil will not collapse the emptied structure.

FOR MORE INFORMATION

Livestock waste regulatory information can be received from the South Dakota DENR, Foss Building, 523 East Capitol Avenue, Pierre, South Dakota, 57501-3182, phone (605) 773-3351. Information about livestock waste management systems can be obtained from county Extension offices and Soil Conservation Services offices.

USE CAUTION

Take extreme caution when working with manure storage structures. Stored manure generates noxious gases that can kill a person quickly:

- **NEVER enter any manure-storage structure, one currently in use or an abandoned structure, without first ventilating it and then continuing the use of forced ventilation.** The use of a self-contained breathing apparatus is recommended.
- **NEVER enter a manure-storage structure without an attached safety line;** and then, only enter in the presence of enough personnel to retrieve the person in the structure if that should be necessary.



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