

NORTH DAKOTA LIVESTOCK WASTE MANAGEMENT REGULATIONS THE FEEDLOT PROGRAM

STATUTORY RESPONSIBILITY

The North Dakota Department of Health has the statutory responsibility to control the pollution of the surface waters, ground waters, and the air of the states.

Water Quality Standards have been developed and adopted for the surface waters of North Dakota, as provided by the Water Quality Act of 1965. An extensive Water Pollution Control Act, addressing among other things the control of livestock waste, was adopted by the 1967 state legislature.

The Rules and Regulations for the Control of Pollution from Certain Livestock Enterprises were first issued in 1972 by the State Health Department and updated in 1989.

DEFINITIONS

To describe the feedlot program, a few key terms must be defined. Definitions given below are based on the livestock regulations (North Dakota Administrative Code 33-16-03-04).

1. Feedlot or Concentrated Feeding Operation – Any livestock feeding, handling, or holding operation or feed yard where animals are concentrated in an area: (1) which is not normally used for pasture or growing crops and where animal waste can accumulate; (2) where the space per animal unit is less than 600 square feet. Six hundred square feet is an area 30 by 20 feet. Normal cattle wintering operations are not included, except when these particular operations cause or are likely to cause pollution.
2. Livestock – Any animal raised for food or pleasure including, but not limited to, beef and dairy cattle, sheep, swine, poultry, and horses. The definition also includes fur animals raised for their pelts.
3. Animal Unit (AU) – A unit of measurement equal to approximately 1,000 pounds of animal. Some common AU equivalents are:

<u>Animal</u>	<u>AU Equivalent</u>
1.5 feeder cattle	1
1 mature dairy or beef	1
1 horse	1
4 swine	1
8 sheep	1
30 turkeys	1
80 chickens	1

For animals not listed, the department determines the AU equivalent to be approximately equal to the average weight of the animal divided by 1,000 pounds.

4. Floodplain – Any area covered by runoff or floodwater once every three years (as based on historical flood records).

PROHIBITED PRACTICES

State law prohibits the following practices:

1. Feeding of livestock on ice.
2. Feeding of livestock or handling livestock waste in any way that would allow the waste to enter waters of the state, or to be washed into these waters by runoff from rain or snow melt.

OPERATIONS REQUIRING APPROVAL

Approval from the State Department of Health is needed for the following operations.

1. All concentrated feeding operations where the number of animals being fed, handled or held at any one time is greater than or equal to 200 animal units.
2. All concentrated feeding operations which are located on a flood plain and which have or exceed 100 animal units.
3. Any concentrated feeding operation where the distance to any surface waters is less than 2 feet per animal unit. This includes all waters except those which are completely contained on an operator's property and which do not join with natural surface or underground waters.

For example, if you have 100 animal units and if they are fed within 200 feet of any surface water not completely contained on your property, you must have approval from the department.

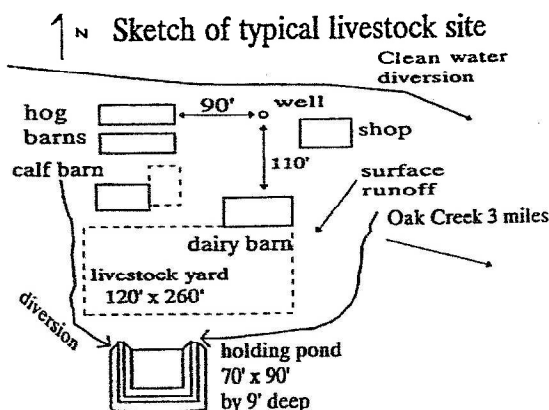
4. Any concentrated feeding operation, regardless of its location or the number of animal units, if the department has found it is causing or is likely to cause pollution.

HOW TO GET APPROVAL

Waste management systems of the livestock operations described above must be approved by the State Department of Health.

For a livestock operation to be approved, an application must be sent to the department's Water Quality Division. The application should be as complete as

possible and include design plans for all livestock manure handling structure including diversions, storage structures and transfer equipment. A sketch should be included, showing distances from barns, open lots, and manure stockpiles to surface waters, drainage ways, and existing and abandoned wells (see example). A map of the entire area within a 2-mile radius of the facility should also be attached. A topographic map showing land contours and drainage ways is preferred.



The department will review the application. If the facility is designed and operated to prevent livestock waste from entering waters of the state and to prevent pollution, a letter of approval will be sent to the operator. This approval is valid as long as the facility is not changed.

If the facility has the potential to cause pollution, the department will require steps be taken to prevent waste from entering waters of the state. These steps can range from fencing livestock out of a certain area to constructing diversions or a storage pond to contain and hold all waste.

WASTE MANAGEMENT PRACTICES

The Health Department has the authority to address water quality concerns. The department cannot address zoning issues such as land use, impacts on property value, impacts on roads, etc. While the department does have odor rules, they are not addressed in the livestock regulations, making it difficult for the department to take action unless there is an actual odor violation.

The department must rely on local zoning authorities to examine these concerns, particularly nuisance issues. Satisfactorily addressing all issues before the facility is constructed will help ensure the success of a proposed facility.

LAND APPLICATION

The best way to keep livestock waste out of waters of the state is to put it on cropland where the nutrients can be utilized. It is beneficial to test the nutrient content of the waste so it can be applied at a rate that will supply the needs of the crop to be grown.

More of the nutrients remain in the soil if waste is incorporated into the soil. Incorporating waste also helps minimize odors from land-applied waste. When applying waste, it should be kept out of drainage ways or areas where it could be washed away.

OPEN LIVESTOCK LOTS

The amount of waste can be minimized by diverting clean water away from the livestock lot. All waste and runoff from the livestock lot should be contained on the property and prevented from reaching any natural drainage. A containment pond is often constructed to contain the waste and runoff from the site. This pond must be emptied regularly and must not be allowed to overflow. The pond must be able to store all runoff from this lot for a minimum of 180 days.

INDOOR LIVESTOCK FACILITIES

Indoor facilities should be able to store livestock waste for at least 180 days to avoid land application on frozen ground. Waste stored outside must be in an area where any runoff can be contained. Many enclosed livestock facilities have liquid waste handling systems which include a holding pond. These systems work very well when they are maintained and emptied regularly (usually one or two times per year). These ponds must not be allowed to overflow.

WANT MORE INFORMATION?

There are several places you can obtain information on managing livestock waste.

For more information on regulations and developing waste management systems, contact:

North Dakota Department of Health
Water Quality Division
1200 Missouri Avenue
PO Box 5520
Bismarck, ND 58506-5520
(701) 328-5210

Your local Natural Resources Conservation Service office may also be able to provide information on developing livestock waste systems and utilizing waste for crops.

The Extension Service and North Dakota State University or your local county Extension agent have reference materials on livestock waste systems and may be able to assist you. One helpful publication is the Livestock Waste Facilities Handbook published by the Midwest Plan Service which can be purchased through NDSU Extension.

Your local district health unit may also be able to assist you with questions on livestock waste issues.