



Minnesota
Pollution
Control
Agency

Stormwater Control Requirements at Feedlot Construction Sites

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Stormwater control practices at feedlot construction sites prevent sediment from entering surface waters. On March 10, 2003, the federal government broadened the stormwater regulations to include construction sites where one acre or more of land is disturbed. In the past, stormwater control regulations only affected sites that disturbed five or more acres. These regulations apply to feedlots, as well as construction of houses, buildings, landfills, airports, roads, or other clearing, grading or excavating projects. Minnesota's stormwater control requirements are included in Minn. Rules chapter 7090. The sediment and erosion control requirements at feedlot construction sites described below are based on Minn. Rules ch. 7090.2010.

Permits

The permitting program to control stormwater runoff is the National Pollutant Discharge Elimination System (NPDES) program. The same federal permit program is required for concentrated animal feeding operations (CAFOs) and any facility with more than 1,000 animal units (AU). The U.S. Environmental Protection Agency delegated permitting authority for both the stormwater and feedlot NPDES programs in Minnesota to the Minnesota Pollution Control Agency (MPCA).

In addition to issuing federal NPDES permits, Minnesota issues state feedlot permits for construction activities at feedlots that are not CAFOs (non-CAFOs). Construction short-form permits are required for construction at all non-CAFOs

between 300 and 1,000 AU that are not pollution hazards. Interim permits are required for all sites less than 1,000 AU that are correcting a pollution problem.

To protect water quality while keeping the permitting system as simple as possible, the MPCA is not requiring separate permits for stormwater control and feedlot construction activities. Instead, stormwater requirements are added to the existing feedlot permits as described below.

Sediment and erosion control at feedlot construction sites

Stormwater control requirements are as follows:

1. Feedlot is defined or designated as a CAFO or has a capacity of 1,000 or more AU

Feedlot NPDES permits are required for CAFOs and sites with a capacity of 1,000 or more AU. If construction disturbs one acre or more, then the feedlot owner must follow all sediment and erosion control practices described in the NPDES permit obtained for feedlot construction.

2. Non-CAFOs with less than 1,000 AU

If construction disturbs one acre or more at non-CAFO sites with less than 1,000 AU, the feedlot owner must follow the applicable Best Management Practices (BMPs) described on the back side of this fact sheet, even when a state feedlot permit is not required. If the sediment and erosion control BMPs in this factsheet are not

adopted, the feedlot owner may be required to apply for a stormwater NPDES permit.

Best Management Practices

The erosion prevention and sediment control BMPs below must be followed at all feedlot construction sites where one or more acres of land is disturbed, unless additional or alternative stormwater control practices are specifically required in a permit issued for the feedlot construction activity.

Minimize size of disturbed area

When permanent vegetation must be disturbed, limit the area of disturbance to the minimum required for the project.

Sediment controls

Where disturbed areas have steep slopes or concentrated flow, use a combination of buffers and/or other sediment control measures (e.g. silt fences or properly keyed and staked hay bales) as necessary to protect surface waters and subsurface drainage systems, including tile inlets. All sediment control practices must be established on down gradient perimeters of the feedlot or manure storage area before beginning construction activities that disturb the upgradient soil. These practices shall remain in place until other temporary or final stabilization practices have been established.

Soil stockpiles

Place topsoil or other temporary stockpiles of soil in locations where they will not be subject to erosion from channelized flow (e.g. avoid grassed waterways, tile inlets, gullies, road ditches, drainage ditches, intermittent streams or other water conveyance systems). If stockpiles are placed within 300 feet and up-slope of a water of the state or tile inlet for more than three days, or when precipitation and runoff are imminent, use a grass buffer or use equivalent sediment control measures between the soil stockpile and surface water or tile inlet (e.g. silt fences or properly keyed and staked hay bales).

Immediately seed and temporarily stabilize disturbed areas

Seed and temporarily stabilize disturbed areas until the seed establishes a permanent vegetative cover. All exposed soil areas must be stabilized no later than 14 days after the construction activity has temporarily or permanently ceased. The exposed soil areas need to be

stabilized within 7 days if stormwater from the disturbed land flows to special waters or waters impaired for phosphorus, turbidity, dissolved oxygen or biotic impairment that are within one mile of the disturbed land.

- Grade along the contour and use surface roughing techniques such as slope tracking and tracked equipment;
- Compact the soil surface of concentrated flow areas to reduce soil erodibility;
- Apply mulch or erosion control blanket; and/or
- Install fiber rolls, sand or gravel filled berms (can be filled bags for removal), and/or geotextile erosion barriers across concentrated flow areas such as waterways.

If construction is completed after the fall seeding cutoff date, apply dormant seeding and/or implement any of the temporary stabilization BMPs listed above that are effective and appropriate for the site conditions. Implement seeding and final stabilization as soon as feasible during the following spring.

Final Stabilization

Disturbed areas must be protected by permanent erosion control materials or other BMPs that achieve the equivalent of 70 percent uniform vegetative cover.

For more information

For more information, contact your area MPCA office listed on the front page of this fact sheet and ask for the feedlot specialist. Your county NRCS and SWCD offices can also answer questions about sediment and erosion control practices.