

September 2021



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COUNTY

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<https://www.pca.state.mn.us/water/feedlots>

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Stevens County 2021 Feedlot Newsletter

Manure Application and Record Keeping

Keeping records of certain manure application practices is required for all feedlot facilities with 100 or more animal units, even when a manure management plan is not required. Forms and spreadsheets for keeping required records are available from our office or at:

<https://www.pca.state.mn.us/water/land-application-manure>

Good records are important to account for second-year nitrogen from manure applications. Records also allow better estimates to be made of total manure nutrients generated at the farm, thus aiding in future planning efforts.

Manure application records must be kept for the most recent three years, except that records must be kept for six years at NPDES permitted feedlots and when manure is applied at any site within 300 feet of lakes, streams, intermittent streams, drainage ditches that are not protected by berms, or DNR protected wetlands. The required record-keeping elements for other sizes of feedlots are also available from our office.

Where ownership of manure is transferred for application to fields not owned or leased by the feedlot owner, the manager of the cropland where manure is applied and the feedlot owner must keep records where the manure is produced.

Commercial applicators spreading manure onto land not owned or leased by the owner of the feedlot from which the manure is produced shall also keep a copy of the records. A copy must be submitted to the owner of the animal feedlot or the manure storage area from which the manure is produced, not later than 60 days following land application.

The County is required to conduct a manure record check when conducting annual feedlot inspections. To avoid a possible Letter of Warning or Notice of Violation letter, be sure to keep the appropriate records for your size of feedlot. If you have any questions about whether you need to keep records of your manure application or what information is required for your livestock operation, just call my office for more information.

Manure Land Application in Winter Requires Extra Care

Farmers who spread manure during winter must ensure that it doesn't run off with rapid snowmelt flowing to ditches, streams and other waters. Manure-contaminated runoff not only threatens water quality, it reduces the value of manure as a crop nutrient. Minnesota rules require a 300-foot setback for surface waters and open tile intakes for all manure spread onto frozen or snow-covered soil.



Steps to prevent manure runoff:

- Avoid steeper slopes by choosing the flattest field or flattest parts of fields with less than 6% slope for solid manure, 2% for liquid manure.
- Choose fields that contain the most crop residue (greater than 30%). Tillage along contours creates furrows to help capture any potential runoff.
- Do not apply non-incorporated manure within 300 feet of surface waters. If possible apply at even greater setback distances.
- Avoid flood or floodway zones.
- Avoid applying to fields where the furrows are full of ice and snow.
- Keep application rate low enough to avoid runoff or ponding during application.

For more information, see the MPCA factsheet: Managing Manure and Land Application During Adverse Weather Conditions at: <https://www.pca.state.mn.us/sites/default/files/wq-f8-46.pdf>

If an Accident or Spill Happens



Take immediate action to reduce environmental impact:

- Create temporary berms to stop discharge
- Temporarily plug culverts & drain tile intakes to prevent manure inflow
- Soak up liquid with absorbent material, such as hay, straw, cornstalks or wood shavings
- Must report incident to Minnesota Duty Officer by calling 800-422-0798

Did you know....

Manure from all manure storage areas of more than 100 animal units must be tested for nitrogen & phosphorus content at a minimum of once every four years.

Exception: Test once per year for at least three years if manure is from a 300 or more animal unit storage and then every four years.

For more information go to:

<https://www.pca.state.mn.us/water/land-application-manure>

Soil Testing...

For land receiving manure from feedlots with 300 or more animal units, soil samples must be taken from the upper 6 inches once every 4 years. These samples must be tested for phosphorus using the Bray P1 or the Olsen test.

Feeding livestock on pasture and crop residue

Using management practices to avoid creating feedlot conditions

Proper livestock feeding practices on pasture and crop residue are necessary to avoid adverse environmental impact. The most common type of seasonal or crop residue grazing is stock cows on corn stalk residue after combining. It requires available water and sufficient crop residue that is not covered by snow or ice. These grazing areas typically will be planted to a crop the following growing season. Feed is brought in when crop residue or pasture grasses are not adequate to sustain livestock. Feed bunks and round bale feeders are common types of feeding equipment.



Pasture and crop residue grazing management practices

By moving the location of feeding equipment, the formation of manure packs around feeding equipment will be minimized and environmental impacts reduced. The frequency of movement will depend on the number and size of animals in any given area.

Locate sites away from sensitive areas

It is the producer's responsibility to locate and manage all feeding equipment and areas so that manure contaminated runoff from the site does not discharge into waters of the state. Avoid locating feeding equipment in the following areas:

- Rock quarries, gravel/sand pits or any mining excavation sites;
- Designated shoreland areas;
- 100-year floodplains;
- 300 feet from tile inlets, drainage ditches, streams, or wetlands;
- 100 feet of a private well; if a sensitive water supply well, 200 feet;
- 1000 feet of a community water supply well;
- Land with greater than six percent slope.

Impact of over-stocking

When stocking density exceeds the carrying capacity of the available crop residue or pasture grasses, the soil canopy maybe substantially reduced, lessening its effectiveness against soil erosion. Accumulation of livestock waste exceeding the upcoming crop or grass nutrient needs, particularly phosphorus, can create feedlot conditions with potential to negatively impact the environment, particularly if the livestock are located near a sensitive area such as a lake or stream. Feed from grazing on stubble fields or cropland where the stover has been removed or harvested is less palatable and often has little feed value for livestock.

Odor Exemption (MN Rule 7020.2002)

The owner of an animal feedlot is exempt from the state ambient air quality standards during the removal of manure from barns or manure storage facilities if notification is provided to the County Feedlot Officer or the Minnesota Pollution Control Agency. This exemption allows the ambient air quality standard to be exceeded for a maximum of 21 days in a calendar year for feedlots with 300 or more animal units. The notification can be done by phone, in person, or by submitting an air quality exemption form. The notification must include:

- The names of the owners or the legal name of the facility
- The location of the facility by county, township, section and quarter section
- The facilities permit number, if applicable
- The anticipated start date and the anticipated number of days of removal from barns or manure storage areas

Although you qualify for an exemption, always consider your neighbors and talk to them about your manure application plans. If possible, tell them how long it might take, how you plan to apply the manure and how long they might expect to smell the manure. Ask them about any events such as a graduation, wedding, etc. so you can avoid application prior to the event. Good communication is the key.