



STEVENS COUNTY  
MINNESOTA

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<https://www.pca.state.mn.us/quick-links/feedlots>

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# Stevens County 2018 Feedlot Newsletter

## Manure Application and Odor

Owners of animal feedlots are exempt from state air quality standards during the time manure is removed from barns or manure storage areas if notification is provided to the County Feedlot officer or MN Pollution Control Agency. Minnesota Rules (Chapter 7020.2002) allow livestock farmers to exceed ambient air quality standards for a maximum of 21 days per calendar year for sites with over 300 Animal Units. Notification can be submitted by phone, in person, or by completing an air quality exemption form. The information submitted with the notification must include:

- Facility & Legal Owner's Names
- Location: County, Township, Section, 1/4 Section
- Feedlot Permit Number (if applicable)
- Anticipated Start Date & Duration

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.

## Temporary Manure Stockpiling

Stockpiling manure is a common method of storing solid manure until it can be applied to cropland as fertilizer. Manure stockpiles must be located, constructed, and operated so that manure contaminated runoff does not enter waters of the state. Only solid manure can be stockpiled outside a barn or feedlot. Short-term stockpiles are allowed to stay in the same location for only one year. Upon removal, the area must be planted to a vegetative cover for at least one full growing season prior to re-use. Owners must maintain records of these piles that include:

1. Location of Stockpile
2. Date of Establishment
3. Volume of Manure
4. Manure Nutrient Analysis
5. Land Application Date

A few additional requirements for manure stockpile management include: maintaining at least 2 feet of separation between the bottom of the stockpile and the seasonal high water table. Soil texture must not be coarser than a sandy loam to a depth of 5' below the stockpile. The stockpile must also have 3:1 side slopes or a minimum of 15% dry matter.

Sensitive Feature	Manure Stockpile Setback Requirement
Open tile intakes, uncultivated wetland or other waters of the	300' flow distance and minimum 50' hori-
Private well (with >50' watertight casing, & cased through a confining layer)	100'
Protected waters lake, wetland, flowage	300'
DNR protected waters creek, stream, river	300'
Drain tile with less than 3' soil cover	100'
Community water wells	1000' if vulnerable (or 200' if not vulnerable)

## 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

## Low Interest Loans Available



The Stevens County Environmental Services office has funding available for manure handling equipment and manure storage facilities along with other eligible practices such as conservation tillage equipment and septic systems. Easy application, fixed interest rates at 3%. You choose the lender. Funding made possible by the Minnesota Department of Agriculture. Call for more details at 320-208-6558.

## 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 may be 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.

## Be Sure to Keep Manure Application Records

Keeping records of certain manure application practices is required for all feedlot facilities with 100 or more animal units (AU), even when a manure management plan is not required. 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 sampling is also required for feedlots with over 100 AU. The manure must be tested for nitrogen and phosphorus content at least once every four years. Minimum record keeping requirements are as follows for:

100-299 AU: 1) Recent manure analyses; 2) Field IDs/acres for each field, and amount of manure applied per acre; 3) Plant-available N per acre, including carry-over N

300-999 AU: Items 1 - 3 above plus; 1) Manure management plan unless the manure application is by a licensed commercial applicator; 2) Application dates; 3) Soil phosphorus test results; 4) Plant-available P<sub>2</sub>O<sub>5</sub> per acre from manure and commercial fertilizer.

Manure application records must be kept for the most recent three years, except that records must be kept for six years at NPDES (over 1000 animal units) 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 County is required to conduct a manure record check (for facilities with 100 or more AU) when doing 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, feel free to contact our office.