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[www.pca.state.mn.us/hot/  
feedlots.html](http://www.pca.state.mn.us/hot/feedlots.html)

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Any information on feedlot rule requirements can be found at:

[www.pca.state.mn.us/  
index.php/topics/feedlots/  
feedlots.html](http://www.pca.state.mn.us/index.php/topics/feedlots/feedlots.html) or by contacting the County Feedlot Officer.

# Stevens County 2012 Feedlot Newsletter

## County Feedlot Program

Minnesota's regulatory feedlot program includes an optional arrangement between the Minnesota Pollution Control Agency (MPCA) and county government. This cooperative program is known as "county delegation" or the "county feedlot program". County feedlot programs are responsible for the implementation of feedlot rules and regulations, with the exception of large feedlots that require federal permits. Fifty-five counties including most of the major feedlot areas participate in the county feedlot program.

The growing importance of county feedlot programs stems from the success of exiting programs and recognition that administration at the local level is effective and has many benefits. Counties have considerable experience and sensitivity to local practices and conditions that can help to expedite feedlot permitting needs and compliance concerns. This includes knowledge of private and community well-water supplies, soils, high priority watersheds, and an under

## Feedlot Registration

Am I required to register? The location and number of animals at the site determines whether or not a feedlot must register. Owners of the following operations must register:

- 1) Feedlots located in shoreland, and that maintain 10 animal units or more.
- 2) Feedlots located outside of shoreland, and that maintain 50 animal units or more.



standing of local zoning and land use plans, ordinances and issues. Also, county staff have the advantage of being part of a network of local agencies where technical assistance and other programs can be coordinated to support the needs of the feedlot owner.

In 1991, Stevens County became a delegated county and designated the Environmental Services Director (ESD) as the County Feedlot Officer (CFO). The position assumes responsibility and leadership for implementing feedlot rules and regulation in the county.

The ESD is located at the County Courthouse.

Delegated counties receive state grants to help fund their programs. Funds are awarded based on the number of registered feedlots in the county with more than 50 animal units (10 in shoreland) and the level of inspection completed. Stevens County currently has 156 registered feedlots. The delegated county annual work plan requires the ESD to conduct inspections on 7 percent of the registered feedlots or 11 per year.

**Shoreland.** In most instances, refers to land that is 1,000 feet or less from a lake or 300 feet or less from a river or stream.

**Animal unit (AU).** Is a term used to compare the differences in the production of animal manure. The table below shows the typical number of animals that it takes to exceed 10 animal units or 50 animal units.

AU	Dairy Cows	Beef Cows	Feeder Pigs
10	8	10	35
50	40	50	170

**Pasture.** Do not need to register if the areas where grass or other growing plants are used for grazing and where the concentration of animals is such that vegetative cover is maintained during the growing season.

### About Environmental Services/Planning & Zoning Office

The department was created to carry out mandated environmental laws of MN. The department has the responsibility of Solid Waste Programming, Planning/Zoning Administration, Septic System Inspection and as the County Feedlot Officer.

This newsletter is focused on the County Feedlot Program and is intended to inform county feedlot owners and producers of laws, rules and information to prevent violations and health threats. It is the goal of our department to work cooperatively with county producers by implementing cost effective measures to environmentally improve their operation while meeting the goals and objectives of our annual feedlot work plan and the state feedlot rules.



### Is our operation a feedlot?

For purpose of definition a feedlot is any area where animals are confined at a density where manure is accumulated and/or vegetation can not be maintained. This could be an open lot, a barn, or pole building that contains animals. Such operations are subject to state regulations and are required to register if they house more than 50 animal units or are in shoreland and house more than 10 animal units.

## Fall is the Time to Sample and Analyze Manure

Fall is a good time to sample and analyze manure for nutrient content. Manure from all storage areas storing manure produced by more than 100 animal units must be tested by the feedlot owner for nitrogen and phosphorus content at least once every four years, given the following requirements have been met:

1. For feedlots with 300 or more animal units that are not required to have an National Pollutant Discharge Elimination System (NPDES) permit, three years of annual testing have been conducted in the past and the results have been consistent.

2. Additional samples are taken and manure tested whenever there are changes in manure nutrient content due to unusual climatic conditions or changes in manure storage and handling, livestock types or feed rations.

Only the individual storage areas that hold manure from more than 100 animal units must be tested. For example, testing is not required for each small stockpile generated by less than 100 animal units.

Laboratories certified by the Minnesota Department of Agriculture (MDA) or MPCA approved on-farm sampling and analysis must be used. A list of

laboratories providing manure testing services can be obtained at the MDA website:

<http://www.mda.state.mn.us/en/animals/feedlots/feedlot-resources/feedlot-consultants.aspx>



## 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 your county feedlot officer.

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.



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 the county feedlot officer for more information. Otherwise the website addresses below will allow you to find and print the proper form for your size feedlot.

Website for record keeping form: <http://www.pca.state.mn.us/index.php/topics/feedlots/feedlots.html>

Under "Producer Information" click on "Nutrient and Manure Management". Search under "Record Keeping Forms and Instructions" for the appropriate form for your feedlot.

Transferred manure instructions: <http://www.pca.state.mn.us/index.php/view-document.html?gid=3563>

Transfer record form: <http://www.pca.state.mn.us/index.php/view-document.html?gid=3561>

## Feedlot Rule Requirements for Stockpiling Manure

Stockpiling of manure is a common method of storing solid manure until it can be applied to cropland as fertilizer. The Minnesota Feedlot Rules Chapter 7020.2125 requires certain guidelines for stockpiling manure.

Stockpiles must be located, constructed and operated so that manure-contaminated runoff from the site does not discharge to waters of the state. Only solid manure can be stockpiled outside a barn or feedlot. It should be able to maintain a 3:1 horizontal-to-vertical ratio or have at least 15 percent solids content. No stockpiling is allowed in rock quarries, gravel pits, or in any mining excavation sites. The size of a stockpile is limited to a volume needed to supply the agronomic needs of crops on a field up to 320 acres.

### Short-term (stockpiled less than one year):

Manure can only be stockpiled for up to one year of the date when it was initially established. A vegetative cover must be established for at least one full growing season prior to reuse.

Stockpiles must not be located within:

1. 300 feet of flow distance, or 50 feet horizontal distance to waters of the state, open tile intakes, and uncultivated wetlands.
2. 300 feet of flow distance, or 50 feet horizontal distance, to any road ditch that flows to any of the features mentioned in number 1.
3. 100 feet from a private well (200 feet if the well has less than 50 feet of watertight casing).
4. 100 feet from a field drain tile that is three feet or less from soil surface.
5. Stockpiles must not be located on land with greater than a six percent slope. (If between two and six percent, clean-water diversions and erosion practices must be installed.)
6. Maintain a minimum distance of two feet between the base of the stockpile and the seasonal high-water table.



7. Stockpiles are not allowed on soils coarser than a sandy loam to a depth of five feet.

Record Keeping : The owner must maintain records for each stockpile for three years. Records should include the location, the date it was established, the volume of manure, the nutrient analysis, the date the manure was land applied.

Permanent Stockpile Sites (Manure is stockpiled for more than one year or the same site is used year after year):

The owner should contact the County Feedlot Officer or check out the following website for more information: <http://www.pca.state.mn.us/index.php/topics/feedlots/feedlots.html>

Click on “Nutrient and Manure Management.”

## 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/year for at least three years if manure is from a 300 animal unit storage and, and then every four years.

For more information on manure application requirements see:

[www.pca.state.mn.us/hot/feedlots.html](http://www.pca.state.mn.us/hot/feedlots.html)

Click on “Nutrient and Manure Management.”



## Manure Application Setbacks Near Sensitive Features

The risk of polluting surface waters increases when manure is applied to high phosphorus soils, steep slopes or land near lakes, streams, ditches, wetlands or open tile intakes. Surface water can carry phosphorus, pathogens, ammonia, and oxygen-depleting substances. The MPCA feedlot rules have minimum manure application requirements from where manure is spread to sensitive features such as ditches, tile intakes, wetlands, or streams. A basic rule of thumb is to keep manure 300 feet from any surface water or potential flowage (example–road ditch) if it will not be incorporated within 24 hours. If winter application is necessary, all manure must be kept 300 feet away from sensitive areas since it can not be incorporated. If manure is incorporated within 24 hours it is usually okay to be within 25 feet of the sensitive feature (see table below).

STATE MANURE APPLICATION SETBACKS (In feet) NEAR SENSITIVE FEATURES	WINTER Frozen/snow covered soil	NON-WINTER With immediate incorporation < 24 hrs.		NON-WINTER Not incorporated within 24 hrs.	
		With Phosphorus Management	No Phosphorus Management	With Vegetated Buffer	Inadequate Veg. Buffer
Lake, stream	300	25	300	100	300
Intermittent stream, DNR protected wetland, drainage ditch without berms	300	25	300	50	300
Open tile intake	300	0	0	300	300
Well, mine or quarry	50	50	50	50	50

## 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.





**ENVIRONMENTAL SERVICES & PLANNING/ZONING OFFICE**

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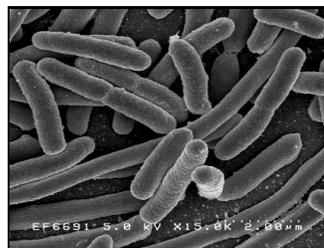
**Incentives for Bacteria Reduction in the Pomme de Terre River Watershed**

Fecal coliform bacteria is bacteria that exists in the fecal matter of warm blooded animals. As part of the effort to reduce the delivery of fecal matter to our water, the Pomme de Terre Watershed Project received a grant to implement Best Management Practices on the ground to reduce fecal coliform bacteria levels in the watershed. The watershed now has extra incentives and cost share money for the following practices:

1. Vegetated buffer strips for manured crop fields and cattle pastures adjacent to or near protected waterways.
2. Vegetated buffer strips for feedlot runoff control.
3. Livestock exclusion fencing.
4. USDA-NRCS prescribed grazing systems.

These incentives and cost share dollars will be in addition to whatever cost share or incentives

are available through existing programs like CRP or EQIP. Priorities will be given to those fields or pastures adjacent to or near protected water courses, tributary lakes and wetlands.



**E. coli can be present in fecal coliform**

Incentive Payments and Cost Share Amounts:

Exclusion Fencing — A cost share of up to 25% of the cost of the fencing.

Prescribed Grazing Plans — An incentive payment of \$22.50/acre of pastureland enrolled into an

EQIP prescribed grazing plan.

Feedlot Buffer — An incentive payment of \$1,000/acre.

Manured Cropland or Pasture Buffer Strips — Upfront incentives based on practice type and length.

- 10 yr. CRP contract: (CRP per acre payment) x (20%) x (10) x (# of acres)
- 15 yr. CRP contract: (CRP per acre payment) x (30%) x (10) x (# of acres)
- Permanent easement: \$1,000 per acre.

All incentives will be paid as a lump sum payment to the landowner when the project is completed.

Cost Share will be paid at completion of the project and remittance of receipts for fencing costs.



**A rotationally grazed pasture system with supplement water. A properly managed pasture can reduce bacteria delivery to waterways by 40%.**



**Exclusion fencing to protect the stream from grazing animals.**

For more information contact the PdT Watershed Coordinator, Brett Arne, at (320)-589-4886 ext. 109 or email [brett.arne@stevensswcd.org](mailto:brett.arne@stevensswcd.org).