The Minnesota Livestock Producer’s Guide to Feedlot Rules
Overview of the Feedlot Rules, Minnesota Rules, Chapter 7020

This guide is intended to help livestock producers better understand environmental regulations that could impact their operations – the Feedlot Rules. It is an updated version of the 2001 publication, which reflects the major changes to the state and federal feedlot regulations as a result of the U.S. Environmental Protection Agency revised rules on Concentrated Animal Feeding Operations (CAFOs), which occurred in 2003. It is not intended to be a substitute for the Rules, nor address every section or provision of them. The guide does not alter the Rules or change their meaning. If any inconsistencies arise between this guide and the Rules, the Rules will prevail. Please refer to the Minnesota Department of Agriculture website at www.mda.state.mn.us/animals/feedlots/ or the Minnesota Pollution Control Agency website at www.pca.state.mn.us/hot/feedlots.html for any updates or corrections, or call the Minnesota Department of Agriculture at 1-800-967-2474 or TTY: 1-800-627-3529.

This updated version has been a cooperative effort between the Feedlot Unit of the Minnesota Pollution Control Agency and the Agricultural Development and Financial Assistance Division of the Minnesota Department of Agriculture.

March, 2008
# Table Of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table Of Contents</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Who should use this Guide?</td>
<td>1</td>
</tr>
<tr>
<td>What does this Guide cover?</td>
<td>1</td>
</tr>
<tr>
<td>What are the Feedlot Rules?</td>
<td>2</td>
</tr>
<tr>
<td>What are some of the basic concepts and definitions?</td>
<td>2</td>
</tr>
<tr>
<td>Do I have a pasture or a feedlot?</td>
<td>2</td>
</tr>
<tr>
<td>How do I determine the size of my feedlot?</td>
<td>3</td>
</tr>
<tr>
<td>CAFOs</td>
<td>5</td>
</tr>
<tr>
<td>Who’s in charge of feedlot regulations?</td>
<td>5</td>
</tr>
<tr>
<td>Determining How the Rules Will Affect You</td>
<td>6</td>
</tr>
<tr>
<td>Do the Feedlot Rules apply to my operation?</td>
<td>6</td>
</tr>
<tr>
<td>What do I need to do if I have an existing feedlot and do not plan to expand or build a new operation?</td>
<td>6</td>
</tr>
<tr>
<td>What do I need to do if I plan to expand or build?</td>
<td>6</td>
</tr>
<tr>
<td>Requirements That Apply to all Feedlots (Existing, Expanding, or New)</td>
<td>7</td>
</tr>
<tr>
<td>What requirements apply to all feedlots?</td>
<td>7</td>
</tr>
<tr>
<td>What is feedlot registration and how do I register?</td>
<td>7</td>
</tr>
<tr>
<td>What standards (technical requirements) apply to all feedlots?</td>
<td>8</td>
</tr>
<tr>
<td>What if my feedlot is out of compliance with the Feedlot Rule or other standards?</td>
<td>9</td>
</tr>
<tr>
<td>What do I need to do to spread manure?</td>
<td>10</td>
</tr>
<tr>
<td>Building or Expanding a Feedlot</td>
<td>10</td>
</tr>
<tr>
<td>Where can I locate or expand my feedlot?</td>
<td>10</td>
</tr>
<tr>
<td>What permits will I need?</td>
<td>12</td>
</tr>
<tr>
<td>What is involved in preparing a complete permit application?</td>
<td>15</td>
</tr>
<tr>
<td>What are the public notification requirements when constructing?</td>
<td>16</td>
</tr>
<tr>
<td>What other paperwork is required?</td>
<td>17</td>
</tr>
<tr>
<td>How long does the process take?</td>
<td>18</td>
</tr>
<tr>
<td>Glossary</td>
<td>22</td>
</tr>
</tbody>
</table>
Introduction

Who should use this Guide?
This manual was developed for all livestock producers—whether you are planning to update or expand your feedlot or are not planning any changes in the immediate future. This manual was first published by the Minnesota Department of Agriculture (MDA) in 2001. This update reflects the changes to the state and federal feedlot regulations that took effect in 2003.

What does this Guide cover?
The guide covers numerous topics that will provide information on how the new requirements apply to you and where to look for additional information, beginning with basic information that applies to all livestock producers, followed by more specific information that applies to fewer producers. Topics covered in this manual will help you answer the following questions:

- What are the Feedlot Rules?
- What are some of the basic concepts and definitions?
- Do the Feedlot Rules apply to my operation?
- What do I need to do if I have an existing feedlot and do not plan to expand or build a new operation?
- What do I need to do if I plan to expand or build?
- What requirements apply to all feedlots?
- What is feedlot registration and how do I register?
- What standards (technical requirements) apply to all feedlots?
- What if my feedlot is out of compliance with the Feedlot Rules or other standards?
- What do I need to do to spread manure?
- What permits will I need?
- What other paperwork is required?
- How long does the process take?

The guide gives you the basic information that you need to know about feedlot regulations and permitting, including numerous links to helpful tools and information. A number of other documents and resources have also been developed to help you with more specific questions that you may have about feedlot regulation in Minnesota. Descriptions of these documents may be found at the end of this guide in “Where Can I Get More Information?” on page 20.
**What are the Feedlot Rules?**

Federal laws (Federal Regulations 40 CFR 122, 40 CFR 123) regulating Animal Feeding Operations (AFOs) and Concentrated Animal Feeding Operations (CFOs) stem from the 1972 Clean Water Act. In Minnesota, these laws are administered by the Minnesota Pollution Control Agency’s (MPCA) Feedlot Program through the Minnesota Feedlot Rules (Minn. Rules Chapter 7020), through the MPCA’s administration of the National Pollutant Discharge Elimination System (NPDES) permit program.

The Feedlot Rules regulate storage, transportation, and utilization of manure; and contain sections on registration and permitting of feedlots, and the delegation of regulatory authority to counties. They also contain location restrictions and expansion limitations around sensitive features such as lakes, rivers, streams, floodplains, sinkholes, and certain wells.

**What are some of the basic concepts and definitions?**

In order to determine if your operation is subject to the Feedlot Rules, you need to know a few basic concepts and definitions, such as: What is the difference between a pasture and a feedlot? What is an animal unit? What is a CAFO? Who is in charge of the Feedlot Rules?

**Do I have a pasture or a feedlot?**

Vegetative cover and manure accumulation are the two main criteria owners must consider when deciding if a portion of their pasture operation is a feedlot.

An animal feedlot is a lot or building or combination of lots and buildings intended for the confined feeding, breeding, raising, or holding of animals and specifically designed as a confinement area in which manure may accumulate, or where the concentration of animals is such that a vegetative cover cannot be maintained within the enclosure. Open lots used for the feeding and rearing of poultry (poultry ranges) are considered animal feedlots.

A **pasture** is defined as areas, including winter feeding areas as part of a grazing area, where grass or other growing plants are used for grazing and where the concentration of animals allows a vegetative cover to be maintained during the growing season.

If a pasture has, or develops feedlot conditions (i.e., manure accumulates and there is a lack of vegetative cover), it is considered a feedlot, **EXCEPT** in the following cases where vegetative cover is not required:

(1) in the immediate vicinity of supplemental feeding or water devices;
(2) in associated corrals and chutes where livestock are gathered for the purpose of sorting, veterinary services, loading and unloading trucks and trailers, and other necessary activities related to good animal husbandry practices; and

(3) in associated livestock access lanes used to convey livestock to and from areas of the pasture (including winter feeding areas).

How do I determine the size of my feedlot?

The size of a feedlot is determined by the number of animal units (AU). AU refers to a standard of measurement of the quantity of manure produced (based on size and manure production) used in Minnesota’s permitting, registration, and environmental review process. However, a different standard of measurement, “animal unit factor” applies when the feedlot is a concentrated animal feeding operation or CAFO. (See the section on CAFOs on page 5.) One animal unit is generally equivalent to a 1,000 pound animal. When more than one type of animal is planned for a feedlot, the number of AU is the sum of the AU for each type of animal. The worksheet in Table 1 will help you calculate the number of animal units your operation holds.
Animal Unit Calculations Worksheet

1. Use this table to calculate animal units for your facility.
2. For each animal type checked, list the maximum number of animals that you intend to have (standing herd size) at the facility at any given time in the next four years. Put that number in the # of Animals column (column 3).
3. Multiply the Animal Unit Factor (column 2) by the # of Animals (column 3) to get the Animal Units for each animal type (column 4).
4. Add the animal unit numbers in column 4 for a total.

Example: If you have 245 heifers, you will check the heifer checkbox, write 245 in column 3 for heifers and multiply 245 x 0.7 (animal unit factor) for a total of 171.5. You will write 171.5 in column 4 for heifers.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Dairy Cattle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Mature cow (whether milked or dry) over 1,000 pounds</td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Mature cow (whether milked or dry) under 1,000 pounds</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Heifer</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Calf</td>
<td>0.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Beef Cattle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Slaughter steer or stock cow</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Feeder cattle (stocker or backgrounding) or heifer</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Cow and calf pair</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Calf</td>
<td>0.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Swine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Over 300 pounds</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Between 55 and 100 pounds</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Under 55 pounds (and separated from sow)</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Horses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Horse</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Sheep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Sheep or lamb</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Chickens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Laying hen or breeder, if the facility has a liquid manure system</td>
<td>0.033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Chicken over 5 pounds, if using a dry manure system</td>
<td>0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Chicken under 5 pounds, if using a dry manure system</td>
<td>0.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Turkeys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Over five pounds</td>
<td>0.018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Under five pounds</td>
<td>0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Ducks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Duck</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Animals not listed in Item A to H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Animals not listed in Item A to H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type 1:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type 2:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average weight of the animal in pounds divided by 1,000 pounds</td>
<td>1: _____</td>
<td>2: _____</td>
<td></td>
</tr>
<tr>
<td>TOTAL ANIMAL UNITS (Add up all numbers in column 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CAFOs

The United States Environmental Protection Agency (EPA) has regulations pertaining to concentrated animal feeding operations (CAFOs). The EPA defines a CAFO differently than the MPCA. The regulations for CAFOs and a definition for large, medium and small CAFOs can be found at the EPA concentrated website at cfpub.epa.gov/npdes/home.cfm?program_id=7. The EPA does not use an animal unit definition, but rather differentiates between a small, medium, and large CAFO based on the number, type, and size of the animals confined on the site. For example, a site with 700 or more mature dairy cows would be considered a large CAFO, a site with 200 to 699 mature dairy cows would be a medium CAFO and a site with less than 200 mature dairy cows would be a small CAFO. Another consideration in determining whether a feedlot is CAFO is whether the facility discharges wastewater and has the potential to pollute. For medium and small CAFOs there are other factors involved in the designation of the site as a CAFO than simply the number of animals on the facility. For additional information on CAFOs you may refer to this EPA document at cfpub.epa.gov/npdes/afo/compliance.cfm.

Who’s in charge of feedlot regulations?

It’s also important to know who is in charge of the feedlot regulations in your county. The Minnesota Pollution Control Agency (MPCA) has the legislative authority to administer the Feedlot Rules which include permitting and regulation. As of October 2007, 54 Minnesota counties have chosen to receive delegation from the MPCA to administer the Feedlot Rules for sites that don’t require the Federal NPDES permit. These counties are referred to as “delegated” counties. The responsibility for the regulation and permitting within these delegated counties is done by the County Feedlot Officer (CFO) who generally works in the county planning and zoning or environmental services office. The MPCA is the agency responsible for feedlot permits and enforcement in the counties that have not received delegation. The MPCA or CFO will be your resource and available to answer questions on the Feedlot Rules. Find your county contact at www.pca.state.mn.us/hot/feedlot-countyprogram.html.

If your existing or proposed facility is not located in a delegated county, the MPCA has provided the following website www.pca.state.mn.us/hot/feedlots.html#contacts which lists individuals responsible for activities including permitting, inspections, and compliance/enforcement. The website also includes a map which shows the area of primary responsibility for the MPCA.

If your facility is a CAFO or has 1,000 AU or more, the MPCA is the permitting authority, even if your county is in the Delegated County Program.
The MPCA or CFO will help you determine what actions are necessary prior to constructing, expanding, or modifying your facility. Contacting them as soon as possible will allow adequate time for the permitting and environmental review processes.

**Determining How the Rules Will Affect You**

*Do the Feedlot Rules apply to my operation?*

If your current or future operation consists solely of pastures, you are exempt from the Feedlot Rules (Minn. Rules, Chapter 7020). This includes site restrictions, registration, permitting, manure management requirements, and restrictions from access to waters of the state (see sidebar). However, pastures must operate in a manner that does not result in water pollution, and state water quality standards still apply. Local ordinances may impose additional restrictions.

If only a portion of your operation is considered a feedlot, only that portion of the operation is regulated under the Feedlot Rules. This includes location restrictions, registration, permitting, manure management requirements, and restrictions from access to waters of the state. Additional fact sheets and information are available from the MPCA online at [www.pca.state.mn.us/hot/feedlots.html](http://www.pca.state.mn.us/hot/feedlots.html) or by contacting your county zoning or environmental services office, or your local University of Minnesota Extension educator.

*What do I need to do if I have an existing feedlot and do not plan to expand or build a new operation?*

Existing feedlots that do not plan to expand or build need to only be concerned with operation and maintenance. Operation and maintenance requires attention to pollution hazards, manure storage, and manure application. Depending on the type of feedlot, operation and maintenance may also include addressing milkhouse wastes, other process wastewaters, and stockpiling. These areas of operation and maintenance will be discussed further in “What standards (technical requirements) apply to all feedlots?” on page 8. [www.mda.state.mn.us/animals/feedlots/dmt/](http://www.mda.state.mn.us/animals/feedlots/dmt/). In addition, the MDA has developed a “Decision Making Tool to the Feedlot Rules” to help livestock producers understand Minnesota’s feedlot rules and to achieve regulatory compliance. The Decision Making Tool is located at [www.mda.state.mn.us/animals/feedlots/dmt/](http://www.mda.state.mn.us/animals/feedlots/dmt/). More information can be found on MPCA’s fact sheets at [www.pca.state.mn.us/hot/feedlot-publications.html#guidance](http://www.pca.state.mn.us/hot/feedlot-publications.html#guidance).

*What do I need to do if I plan to expand or build?*

There are three general areas that pertain when you are planning on expanding or building: they are type of permit(s), public notification, and location restrictions. Your CFO or MPCA
will help you determine which permits are required and discuss location restrictions that may apply. You must also notify the local zoning authority 30 days prior to construction. These three areas are discussed further in “Building or Expanding a Feedlot” on page 10. MDA’s “Decision Making Tool to the Feedlot Rules”, located at www.mda.state.mn.us/animals/feedlots/dmt/, can also help producers understand the requirements. Additional information can be found on MPCA’s fact sheets at www.pca.state.mn.us/hot/feedlot-publications.html#guidance.

Requirements That Apply to all Feedlots (Existing, Expanding, or New)

What requirements apply to all feedlots?

All feedlots capable of holding 50 AU or more (10 AU in shoreland areas) must register with the MPCA and meet the requirements for runoff discharge, manure application and storage, and processed wastewater.

What is feedlot registration and how do I register?

Registration is a simple process that eliminates the need for operating permits for the majority of facilities in Minnesota. The registration program was created to:

- identify location, size, and ownership of feedlots subject to the Rules;
- help identify those operations where pollution problems may be most likely; and
- provide the state with accurate information to help determine what financial impact complying with the Rules will have upon producers.

Once an owner initially registers his or her feedlot, the owner must then update the registration data at least once every four years. The MPCA or delegated county will notify owners that they must re-register at least 90 days before their current registration expires. Also, the MPCA or delegated county will send the owner a receipt within 30 days of receiving the registration information from the owner. Feedlot owners of the following are not required to register:

- Livestock facilities located on county fairgrounds.
- Pasture or grazing operations that have buildings or lots with a capacity of less than 50 animal units, or less than 10 animal units in shoreland areas.
- Pasture or grazing operations that do not have buildings or open lots.

A feedlot owner can register one of three following ways:

1. Fill out the following information on an MPCA registration form and return to the MPCA or, in a delegated county, the delegated county feedlot officer. You may also
obtain a registration form online at www.pca.state.mn.us/hot/feedlot-forms.html#registration. The form will require the following information:

- Date form was completed.
- Name and address of all owners.
- Facility location (township, county, section and quarter section).
- Permit or certificate number, if one has been issued in the past and is known.
- Types of animal holding areas (pastures, confinement barns, open lots).
- Maximum number and types of animals to be housed at the facility.
- Identification of surface waters within 1,000 feet of facility.
- Presence and type of manure storage areas.
- Distance from animal holding area or manure storage areas to a well.
- Name of person completing form.

2. Fill out a permit application (if required to obtain a permit).

*What standards (technical requirements) apply to all feedlots?*

The Feedlot Rules (Minn. Rules, Parts 7020-7020.2225) contain specific technical requirements that apply to all owners of feedlots and all persons involved in handling of manure—not just those required to register or obtain a permit. A feedlot or operation where manure is handled that does not meet technical requirements may be required to make improvements. These technical requirements apply to:

- general operation and management practices;
- feedlot and manure storage area closure;
- liquid manure storage areas;
- poultry barn floors;
- manure stockpiles;
- manure composting; and
- application of manure on crop or pastureland.

Requirements include:

- location and size restrictions;
- construction specifications;
- reporting requirements; and
- operation and management specifications.

Specific information regarding the technical requirements of Minn. Rules, Parts 7020.2000 through 7020.2225 is available online at www.pca.state.mn.us/hot/feedlot-publications.html#techrequirements or by contacting the MPCA or your CFO.
Additional federal, state, and local regulations may apply to your feedlot. The MDA’s *Feedlot Permitting in Minnesota: A Checklist for Producers* ([www.mda.state.mn.us/news/publications/animals/feed&feedlots/permitchecklist.pdf](http://www.mda.state.mn.us/news/publications/animals/feed&feedlots/permitchecklist.pdf)) is written for producers planning to build a new feedlot, or expand or modernize an existing one. The purpose of the booklet is to help producers understand and navigate the various federal, state and local regulations successfully. In addition, your county feedlot officer, planning and zoning administrator, or environmental services administrator can provide you with more detailed information.

**What if my feedlot is out of compliance with the Feedlot Rule or other standards?**

You may need to make changes to your feedlot if a pollution hazard exists. According to Minnesota Rules, a “pollution hazard” means an animal feedlot or manure storage area that:

- does not comply with the technical requirements and has not been issued the appropriate permit; or
- presents a potential or immediate source of pollution to waters of the state as determined by inspection by a CFO or a MPCA staff member.

Pollution hazards may result from many different types of practices, including:

- discharge from an open lot;
- discharge of milkhouse waste, silage leachate, or other process wastewaters;
- releases of manure or manure-contaminated runoff from manure storage areas;
- facilities or practices that do not meet the technical requirements, including:
  - manure storage areas that do not meet the specific requirements;
  - un-permitted or non-certified manure storage areas that fail to meet the requirements;
  - manure stockpiling practices that do not meet the requirements; and
  - land application of manure practices that fail to meet the nutrient rates standards, setbacks from waters, and other requirements.

If you think a pollution hazard may exist, you should contact your CFO or the MPCA immediately to determine what steps need to be taken.

If the MPCA or CFO determines that a pollution hazard exists, you will be notified and, if required to apply for an interim permit, given at least 15 calendar days to submit an application (see discussion on “What permits will I need?” on page 12). Interim permits are valid for up to two years, during which the pollution hazard must be corrected. If the pollution hazard is not corrected during the interim permit timeline, a state disposal system (SDS) permit is required, or enforcement action may be considered. After the pollution hazard has been corrected, no other permits are needed until a modification or expansion is proposed, except that local permits may be required.
**What do I need to do to spread manure?**

There are various requirements for spreading manure depending on the size of the feedlot. All feedlot operators must manage manure to prevent pollution, follow maximum nutrient rate limits, and maintain setbacks from sensitive features. Feedlots with 100 AU or more may have to test manure for nitrogen and phosphorus content, and soil for phosphorus. A manure management plan may also be required along with recordkeeping. Table 2 summarizes the minimum state requirements for manure application. For additional information on each of the requirements you may refer to MPCA’s fact sheet on “Land Application of Manure: Minimum State Requirements” at [http://www.pca.state.mn.us/publications/wq-f8-11.pdf](http://www.pca.state.mn.us/publications/wq-f8-11.pdf).

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Required for under 100 AU?</th>
<th>Required for 100 to 299 AU?</th>
<th>Required for 300 to 999 AU?</th>
<th>Required for 1000 or more AU?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage manure to prevent pollution of waters</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Follow maximum nutrient rate limits</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Maintain setbacks from sensitive features</td>
<td>Yes</td>
<td>Where stored manure is from over 100 AU</td>
<td>Where stored manure is from over 100 AU</td>
<td>Yes</td>
</tr>
<tr>
<td>Test manure for nutrient content</td>
<td>No</td>
<td>Where stored manure is from over 100 AU</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Test soils for phosphorus</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Develop and maintain a manure management plan</td>
<td>No</td>
<td>If permit is required</td>
<td>If permit is required, or if applied by non-certified person</td>
<td>Yes</td>
</tr>
<tr>
<td>Keep land application records</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: MPCA Land Application of Manure: Minimum State Requirements fact sheet

**Building or Expanding a Feedlot**

**Where can I locate or expand my feedlot?**

Local ordinances typically specify where feedlots are permitted and under what conditions. They may also be more restrictive than the state rules. When they are, the local ordinances will prevail in accordance with state statutes. Local animal-related ordinances typically include construction setbacks and separation distances.

Some counties have limitations on the number of animal units allowed at a single facility. Others have minimum acreage requirements. The county planning and zoning office (or whichever office in the county

Additional factors that also may affect setbacks at the local level include:
- Type of manure storage used
- If an odor reduction technology is used and approved by planning commission
- Prevailing wind direction
handles those functions) can advise the feedlot owner of any ordinance standards that may be in place in the County concerning feedlots, including at what size the need for a conditional-use permit may arise. The web link to Local Ordinances Regulating Livestock in Minnesota found at www.mda.state.mn.us/animals/aodisclaimer.htm provides information on local ordinances regulating animal agriculture in Minnesota’s counties. It includes the most common areas of regulation such as setbacks and separation distances, conditional use permits, feedlot size limitations, and minimum acreage requirements. It also provides local contact information and links to local ordinances when available.

There are also numerous location restrictions and setback requirements depending on location. They are as follows:

**Location Restrictions**

In addition to the locally adopted location restrictions, new feedlot or manure storage areas of any size may not be constructed in the following areas:

- In a shoreland. The owner of a feedlot or manure storage area in shoreland that has been unused for less than 10 years must apply for and obtain an interim permit before reopening. If the animal feedlot is not used for more than 10 years, it must be permanently closed.
- In a floodplain;
- Within 300 feet of a sinkhole; and
- Within 100 feet of a private well.

Within 1,000 feet of a vulnerable community water supply well, an existing feedlot or manure storage areas may not:

- Be expanded within shoreland if the feedlot has the capacity for 1,000 AU or more. An existing feedlot or manure storage area may be expanded within shoreland if the capacity of the facility after expansion is less than 1,000 AU and the structure does not encroach on the ordinary high water mark.
- Further encroach into a floodplain.

**Construction setbacks from waters**

There are minimum state setbacks for siting feedlots and manure storage areas near various water types. For information about these setback requirements and definitions of water types, please refer to “Feedlot Rules and Water Types”, located at (www.pca.state.mn.us/publications/wq-f6-77.pdf), and in “Feedlot Construction Setbacks From Open Water” at (www.pca.state.mn.us/publications/wq-f8-30.pdf).
Stockpile Setbacks

Setback restrictions for manure stockpiling near waters of the state, sinkholes, rock outcroppings, and other areas are described in MPCA’s fact sheet, “Technical Guidelines for Stockpiling Manure”, located at (www.pca.state.mn.us/publications/wq-f8-06.pdf).

The rules also include stockpiling restrictions on coarse-textured soils and sloping land.

Construction setbacks from wells

Setbacks for all active and inactive water supply wells that have not been sealed in accordance with Minnesota Department of Health requirements are described in MPCA’s fact sheet, Feedlot Construction Setbacks From Open Water and Wells” at www.pca.state.mn.us/publications/wq-f8-30.pdf. See also the MDH Drinking Water Protection Program web page at www.health.state.mn.us/divs/eh/water/.

Wellhead Protection Areas

Producers need to be aware of “wellhead protection areas”, drinking water supply management areas, and especially those areas that have been identified by local public water suppliers to be vulnerable to contamination. Your local zoning authority, CFO, or MPCA, or the Minnesota Department of Health (MDH) can help you determine which wells and land areas are considered “vulnerable” and to identify boundaries for wellhead protection areas and drinking water supply management areas for public water supply systems. The MDH may be contacted at (800) 818-9318.

What permits will I need?

There are five different permits administered by the State that can be issued for a feedlot or manure storage area:

Interim: For non-CAFO facilities: 1) with less than 1,000 AU and have been determined to be a pollution hazard, or 2) with 300 – 999 AU that are planning to apply manure on any one of the following:
  - extremely high phosphorus soils;
  - soils within 300 feet of waters and with slopes exceeding 6%;
  - in a drinking water supply management area where the aquifer is vulnerable; or
  - from 100 - 300 AU and have a pollution problem.

Construction Short-Form: For non-CAFO facilities with 300 - 999 AU that are constructing or expanding and do not pose a pollution hazard. Your CFO or MPCA field staff will notify you if your feedlot is a pollution hazard.
**State Disposal System (SDS):** For facilities proposing to use new or different technologies, facilities where pollution hazards exist that were not fixed under an interim permit timeframe, and feedlots with 1,000 AU or more that are not CAFOs.

**National Pollutant Discharge Elimination System (NPDES) Permit (General and Individual):** Required by state law for the construction and/or operation of facilities with 1,000 AU or more, or that meet or exceed the large CAFO threshold. NPDES permits are federal permits, under the authority of the United States Environmental Protection Agency (USEPA), that have been delegated to the MPCA to administer.

- **General NPDES Permit:** Issued to facilities that do not have a pollution hazard and operate under the technical standards of the Feedlot Rules. Most facilities qualify for the General NPDES Permit.
- **Individual NPDES Permit:** Individual NPDES Permits are issued for sites using new technology, with compliance issues, or otherwise do not qualify for a General NPDES Permit. An Individual NPDES Permit is issued for facilities that have been determined to be Medium or Small CAFOs.

Additional information on the permits is on the MPCA website at [www.pca.state.mn.us/hot/feedlot-forms.html](http://www.pca.state.mn.us/hot/feedlot-forms.html).

The above covers permits under the 7020 federal laws. Your CFO, county planning and zoning office, or environmental services administrator will inform you if local permits apply. You can find additional information on local permits on MDA’s website for Local Ordinances Regulating Livestock in Minnesota, found at [www.mda.state.mn.us/animals/aodisclaimer.htm](http://www.mda.state.mn.us/animals/aodisclaimer.htm) or page 7 of MDA’s *Feedlot Permitting in Minnesota: A Checklist for Producers* at [www.mda.state.mn.us/news/publications/animals/feed&feedlots/permitchecklist.pdf](http://www.mda.state.mn.us/news/publications/animals/feed&feedlots/permitchecklist.pdf).

In some cases no permit is required by the state for construction and expansion activities. However, county ordinances may require a County Conditional Use Permit. A state permit is not required when the facility:

- is located on county fairgrounds;
- is a feedlot or manure storage area with fewer than 300 animal units that does not have a pollution hazard;
- has fewer than 300 animal units and the producer submits a certification form to the MPCA that allows him to complete corrective measures under the 2005/2010 Open Lot Certification Agreement; or
- is a short-term stockpile or compost site where the owner does not also own a feedlot or other manure storage area.

Table 3 on page 15 provides a summary of permitting requirements.
If applicable, an MPCA, county or township permit will not be issued until the environmental review process is complete. Construction activities cannot begin until all of the appropriate permits are issued. Application forms for the MPCA permits are available online at [www.pca.state.mn.us/hot/feedlots.html](http://www.pca.state.mn.us/hot/feedlots.html) or by contacting the MPCA or CFO.

Sites with fewer than 300 animal units that are not designated as a CAFO do not need to apply for a permit but are still required to comply with the technical standards in the Feedlot Rules.
Table 3 Summary of Permitting Requirements

<table>
<thead>
<tr>
<th>Key:</th>
<th>Interim Permit</th>
<th>Construction Short-Form Permit</th>
<th>State Disposal System</th>
<th>General NPDES Permit</th>
<th>Individual NPDES Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR = Not Required.</td>
<td>(2) NR</td>
<td>(4) NR</td>
<td>(5) NR</td>
<td>(5) NR</td>
<td></td>
</tr>
<tr>
<td>300–999 AU, and not defined as a large CAFO&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>(3) NR</td>
<td>(3) NR</td>
<td>(2) NR</td>
<td>(4) NR</td>
<td>(5) NR</td>
</tr>
<tr>
<td>Existing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion or New Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000 AU or more and/or meets or exceeds the Federal Large CAFO Threshold</td>
<td>NR</td>
<td>NR</td>
<td>(6) NR</td>
<td>(7) NR</td>
<td>(8) NR</td>
</tr>
</tbody>
</table>

Notes:

1. Federal Large CAFO Thresholds are described CAFOs on page 5.
2. An interim permit is not required unless a pollution hazard exists that is not being corrected under an open lot agreement. See sidebar on Open Lot Certification.
3. An interim permit is required if a pollution hazard exists, or if the manure or process wastewater of 300 or more animal units is to be applied:
   - on land where the soil phosphorus tests exceed the levels in Minn. Rules Ch. 7020.2225 subpart 3, item C;
   - on land in special protection areas with slopes exceeding six percent, or
   - in a drinking water supply management area where the aquifer is designated vulnerable under Minn. Rules Chapter 4720.
4. An SDS permit is required when owners of facilities are unable to fix a problem under an interim permit timeframe, or where new technology, construction, or operational methods are being used.
5. Generally not required unless the facility is considered a CAFO. Also, not required unless a producer is not willing to immediately correct pollution problems associated with pollutants that are discharged into waters via a man-made ditch, flushing system, or other similar man-made device; or where a stream or intermittent stream flows through the feedlot area.
6. An SDS permit is required if the feedlot is not a CAFO.
7. A general NPDES permit is required if the facility is a CAFO and meets criteria for general NPDES permit.
8. An individual NPDES permit is required if the facility is a CAFO and does not meet the criteria for a general NPDES permit.

What is involved in preparing a complete permit application?

The actions an owner must take to obtain a permit for his or her feedlot is dependent upon many factors including the facility’s location, capacity, animal type and manure handling system. Contact the township Planning & Zoning office to determine the actions required to construct and operate a feedlot within their jurisdiction.

The MPCA permit application process involves:
• completing an MPCA permit application form;
• developing any additional plans that may be required;
• making the appropriate notifications to the public and/or local governments; and
• completing the Environmental Assessment Worksheet (EAW), if required.

Your CFO or MPCA will also inform you if a manure management plan (MMP) is required. An MMP is not required if the facility is:

• Under 100 AU
• 100-299 AU
• A non-CAFO

Table 4 shows the type of plan required for each type of feedlot permit. To determine which permit is needed please refer to “What permits will I need?” on page 12.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Short-Form</td>
<td>●</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>●</td>
<td>County /MPCA</td>
</tr>
<tr>
<td>Interim Permit</td>
<td>©</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>●</td>
<td>County /MPCA</td>
</tr>
<tr>
<td>NPDES/SDS Permit</td>
<td>© ©</td>
<td>© ©</td>
<td>© © ©</td>
<td>© © ©</td>
<td>© © ©</td>
<td>© © ©</td>
<td>© © ©</td>
<td>MPCA</td>
</tr>
</tbody>
</table>

Notes:
NR = Not Required.
© = May be required, refer to local ordinances.
● = Required, must be made available upon request.
© = Required, must be submitted with permit application.

What are the public notification requirements when constructing?

All facilities must complete proper notification before starting construction/expansion activities.
The MPCA and/or delegated county, and local zoning authorities (county, town, and city) must be notified 30 days prior to the commencement of any construction/expansion activity.

Liquid manure storage plans and specifications must be submitted with the permit application or at least 90 days before the proposed construction/expansion start date.

For facilities with 500 or more animal units, the owner must either:

- publish a notification about their proposal in the local newspaper not later than ten days after mailing a permit application to the MPCA, or deliver in person or mail the information to each resident within 5,000 feet of the proposed feedlot facility, and mail a copy of the notice by first class to the clerk of the town in which the feedlot is proposed not less than 20 business days before the date on which a permit is issued.

What other paperwork is required?

The Feedlot Rules list what records need to be kept and what information is needed for recordkeeping, based on the size of the feedlot and where the manure will be applied.

You are required to keep records if your operation:

- applies or receives manure or process wastewater from a feedlot with a capacity of 100 or more AU;
- when you test poultry barn floors as a permit requirement;
- for short-term and permanent stockpiling sites; and
- for analysis results of manure composting for which NPDES or SDS permits are required.

Will my feedlot be subject to an environmental review?

Although feedlot expansion and new construction often involves some review by local and state agencies for environmental effects, the term “environmental review” refers to the environmental review process conducted under the Minnesota Environmental Review Program (Minn. Rules, Chapter 4410). Environmental review applies to a relatively small number of feedlots. An environmental assessment looks at how a proposed feedlot project will affect the air, water, and land; and at ways to mitigate any problems so that the project can go forward and be environmentally safe. EAWs are mandatory for proposed feedlots over 1,000 animal units, or over 500 animal units in a sensitive area.

For most “environmental review” (e.g. EAWs) the MPCA will conduct the review process as directed under the Environmental Quality Board rules. The MPCA works closely with the CFO in those counties that are delegated. The CFO may be responsible for the
environmental review in instances where the project is required to have “environmental review” at proposed feedlots with less than 1,000 AU. The MPCA, or a county that has been delegated permitting authority by the MPCA, will be your resource and available to answer questions on the Feedlot Rules and Environmental Review Rules. More information is available on the Environmental Quality Board Website: www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm or the MPCA website at www.pca.state.mn.us/programs/envr_p.html.

**How long does the process take?**

It takes four to six months to complete the EAW process for non-controversial sites. The permitting process is done concurrently, but cannot be issued until the completion of the EAW process. A feedlot permit that does not require an EAW is generally issued within 60 days. The key to making the permitting and environmental review processes flow as quickly as possible are:

- Contact the MPCA and county staff prior to completing your permit application to discuss the project and potential problems that may arise;
- Be thorough and clear in completing the application forms; and
- Make sure that the permitting and environmental review staff assigned to your project is able to contact you and/or your consultant with questions pertaining to your project.

An example of a feedlot permitting process in a Minnesota county and timeframe is provide below on the next page.
START HERE
Pre-application meeting with CFO

From permit through completion may take year or more.

Pollution problem?

Yes

Application submitted to CFO and determined to be complete

NPDES permit or EAW required?

Yes

EAW required?

No

Township zoning process (subject to 60-day rule)

If approved

CUP Required?

No

County CFO Review for local and state requirements (subject to 60-day rule)

If approved

CUP Process (subject to 60-day rule)

If approved

Construction may begin if approved

Interim Permit Process

Engineering, financing, construction needed to correct pollution problem

No

If EIS not required

NPDES Permit Process (subject to 60-day rule)

If approved

Source: A Checklist For Producers: Feedlot Permitting In Minnesota, MDA, p. 10.
Where Can I Get More Information?

Minnesota Department of Agriculture
625 Robert Street North
St. Paul, MN 55155-2538
651-201-6000 or 1-800-967-2474
TTY: 1-800-627-3529
www.mda.state.mn.us/ (MDA home page) or www.mda.state.mn.us/animals for the Animals and Livestock web page.

Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155
651-296-6300 or 1-800-657-3864
TTY: 651-282-5332
www.pca.state.mn.us (MPCA home page) or www.pca.state.mn.us/hot/feedlots.html for feedlot information.

Other useful resources available on the Internet:
Minnesota Rules, Chapters 7020 and 4410
www.revisor.leg.state.mn.us/revisor/pages/forms/getrulechap.php
Direct link to the Minnesota Office of the Revisor of Statutes to obtain Minn. Rules, Chapters 7020 and 4410.

University of Minnesota: Manure Management and Air Quality
www.manure.umn.edu/
This website contains information on education and research on manure management and air quality.

Environmental Protection Agency (EPA)
www.epa.gov/ (EPA’s home page.)

US EPA Animal Feeding Operations (AFO)
cfpub.epa.gov/npdes/home.cfm?program_id=7
This website provides an overview on EPA’s Animal Feeding Operations (AFOs) and Concentrated Animal Feeding Operations (CAFOs).

US EPA Concentrated Animal Feeding Operations (CAFO) - Final Rule
cfpub.epa.gov/npdes/afo/cafofinalrule.cfm
The website includes information on the February 28, 2005 Second Circuit Court decision that altered provisions of EPA’s 2003 CAFO rule and the proposed revisions to the CAFO NPDES rule.

United States Department of Agriculture (USDA)
www.usda.gov (USDA’s home page.)
Livestock and Poultry Environmental Stewardship (LPES)
www.lpes.org/
This website contains information on the Livestock and Poultry Environmental Stewardship Curriculum: A National Educational Program.

To Request State Assistance or Report Petroleum Hazardous Materials Spills or Catastrophic Death Loss of Animals
Call 24 Hours a Day

Minnesota State Duty Officer
651-649-5451 or 1-800-422-0798
TTY: (651) 215-6952
Fax: (651) 296-2300

Local Authorities 9-1-1 FIRST, when there is a threat to life or property.
The Minnesota Duty Officer, if there is a public safety or environmental threat and/or if state agency notification for reportable spills is required.
The National Response Center 1-800-424-8802, when a federal notification is required.
Glossary

**Abandoned Well.** There may be as many as 1,600,000 abandoned wells in Minnesota. These wells are paths for nitrates, bacteria, and other pollutants to enter ground water that could become drinking water. Abandoned wells must be properly sealed to prevent contamination.

**Animal Unit (AU).** A standard of measurement of the quantity of manure produced, based on size and manure production, used in the state permitting, registration, and environmental review process. One animal unit is roughly equivalent to a 1,000 pound animal. Federal “animal number thresholds” apply to CAFOs and the need for NPDES permits. More information is available online at the [cfpub.epa.gov/npdes/home.cfm?program_id=7](http://cfpub.epa.gov/npdes/home.cfm?program_id=7).

**County Feedlot Officer.** County staff that administer the program in the county designated by MPCA to issue feedlot permits when a feedlot has less than 1,000 animal units and is not a CAFO.

**CUP.** A conditional use permit. A CUP involves a public hearing, and the local governing board (county or township board, advised by the planning commission) can attach conditions to the permit approval.

**Discharge.** The addition of a pollutant to waters of the state, including a release of animal manure, manure-contaminated runoff, or process wastewater from an animal feedlot, a manure storage area, or an animal manure land application site by leaking, pumping, pouring, emitting, emptying, dumping, escaping, seeping, leaching, or any other means. Discharge includes both point and non-point source discharges.

**Environmental Assessment Worksheet. (EAW)** A document providing basic information about the environmental effects of a project. The EAW is prepared by the responsible governmental unit to determine whether an environment impact statement (EIS) should be prepared.

**Environmental Impact Statement (EIS).** A thorough study of a project with potential for significant environmental impacts, including evaluation of alternatives and mitigation.

**Environmental Quality Board (EQB).** State agency that adopts environmental review rules; monitors their effectiveness, and revises as appropriate; and provides technical assistance to interpret and apply rules.
**Expansion.** Construction or any activity that has resulted or may result in an increase in the number of animal units that an animal feedlot is capable of holding or an increase in storage capacity of a manure storage area.

**Feedlot.** A lot or building or combination of lots or buildings intended for the confined feeding, breeding, raising, or holding of animals specifically designed as a confinement area in which the concentration of animals is such that a vegetative cover cannot be maintained within the enclosure. Open lots used for feeding and rearing poultry are considered feedlots. Pastures are not considered animal feedlots.

**Floodplain.** The areas adjoining a watercourse that have been or could be covered by a 100-year flood.

**Intermittent Streams.** Discontinuous streams that are continuous periodically. This includes all watercourses identified as intermittent streams on U.S. Geological Survey quadrangle maps.

**Manure.** The fecal excretions of livestock and poultry. Manure can include bedding material and water used for livestock. Types of manure have descriptive names such as liquid, slurry, and solid. Manure that has a content of more than 96 percent moisture is liquid. Manure with a moisture content between 90 and 96 percent is referred to as slurry. A moisture content of less than 84 percent is considered solid.

**Manure-Contaminated Runoff.** Liquid that has come into contact with animal manure and drains over land from any animal feedlot, manure storage area, or animal manure land application site and eventually appears in surface streams or water bodies.

**Manure Management Plan.** A manure management plan is a written description of how manure generated at the facility is going to be utilized during the upcoming cropping year(s) in a way that protects surface-water and groundwater quality, while also being beneficial from an agronomic and economic standpoint. Manure management plans are required when an NPDES, SDS, interim, or construction short-form permit application is submitted from an operation with 100 or more animal units, or manure from a feedlot capable of holding 300 or more animal units is applied by someone other than a certified commercial animal-waste technician or certified private manure applicator.

**Manure Storage Area.** An area where animal manure or process wastewaters are stored or processed. Short-term and permanent stockpile sites and composting sites are manure storage areas. Animal manure packs or mounding within the animal holding area of an animal feedlot that are managed according to Minn. Rules, Part 7020.2000, subpart 3, are not manure storage areas.
NPDES Permit. National Pollutant Discharge Elimination System Permit issued by the MPCA for concentrated animal feeding operations and other feedlots with over 1,000 animal units.

Pastures. Areas including winter feeding areas as part of a grazing area, where grass or other growing plants are used for grazing and where the concentration of animals allows a vegetative cover to be maintained during the growing season except that vegetative cover is not required: (1) in the immediate vicinity of supplemental feeding or water devices, (2) in associated corrals and chutes where livestock are gathered for the purpose of sorting, veterinary services, loading and unloading trucks and trailers, and other necessary activities related to good animal husbandry practices, and (3) in associated livestock access lanes used to convey livestock to and from areas of the pasture.

Phased Actions. Two or more projects by the same applicant that will have environmental effects on the same geographic area and will occur sequentially over a limited time period.

Pollution. The presence of a substance in a body of water, the soil, or the air, in such quantities that it impairs the water, soil, or the air and its usefulness, or makes it offensive to sight, taste, or smell.

Pollution Hazard. According to Minn. Rules, Part 7020.0300, “pollution hazard” means an animal feedlot or manure storage area that: does not comply with the requirements of Minn. Rules, Parts 7020.2000 through 7020.2225 and has not been issued the appropriate permit; or presents a potential or immediate source of pollution to waters of the state as determined by inspection by a county feedlot officer or an MPCA staff member.

Process Wastewaters. Waters and/or precipitation, including rain or snow, which comes into contact with manure, litter, bedding, or other raw material or intermediate or final material or product used in or resulting from the production of animals, poultry, or direct products, such as milk, meat, or eggs.

Sensitive Area. Defined in Minn. Rules Chapter 4410 are:
- shoreland;
- a delineated flood plain, except that in the flood plain of the Red River of the North the sensitive area includes only land within 1,000 feet of the ordinary high water mark;
- a state or federally designated wild and scenic river district;
- the Minnesota River Project Riverbend area;
- the Mississippi River Headwaters area;
- an area within a drinking water supply management area delineated under Minn. Rules Chapter 4720 where the aquifer is identified in the wellhead protection plan as vulnerable to contamination; or
- within 1,000 feet of a known sinkhole, cave, resurgent spring, disappearing spring, karst window, blind valley, or dry valley.

**Shoreland.** Land located within the following distances from public water: 1,000 feet from the ordinary high water level of a lake, pond, or flowage; and 300 feet from a river or stream, or the landward extent of a flood plain designated by ordinance on a river or stream, whichever is greater. The limits of shorelands may be reduced whenever the waters involved are bounded by topographic divides which extend landward from the waters for lesser distances and when approved by the Commissioner of Natural Resources.

**Sinkhole.** A surface depression caused by a collapse of soil or overlying formation above fractured or cavernous bedrock.

**Waters of the State.** All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, that are contained within, flow through, or border upon the state or any portions of the state.