PERMITTING & CONSTRUCTING

ANIMAL FEEDING OPERATIONS IN MINNESOTA

A whitepaper by:

Nic Rowe, P.E.
Pro Ag Engineering
507 Milwaukee St.
Lakefield, MN 56150
507-841-3269
nic@proageng.com
www.proageng.com

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The Minnesota Pollution Control Agency (MPCA) reviews and issues the permits required for all feedlots in Minnesota (MN). Feedlots are defined in MN as all types of animal feeding operations (AFO). MPCA regulates the collection, transportation, storage, processing and disposal of animal manure and other livestock operation wastes. The feedlot rules apply to livestock waste management including the location, design, construction, operation and management of feedlots and manure handling facilities.The MPCA feedlot staff is located in St. Paul and six regional offices: Brainerd, Detroit Lakes, Mankato, Marshall, Rochester, and Willmar.

In 55 counties the feedlot program is conducted through a cooperative arrangement between the MPCA and the county government. The county feedlot programs have responsibility for implementing state feedlot regulations for facilities with fewer than 1,000 animal units (AU) and do not require federal permits. The county feedlot program responsibilities include registration, permitting, inspections, assistance, and complaint follow-up.

Most large feedlots over 1,000 AU operate with state and federal permits. These two permits include the State Disposal System Permit and the federal National Pollutant Discharge Elimination System (NPDES) Permit. Most smaller-sized feedlots are not required to have operating permits.The MPCA and/or the delegated counties also issue permits for feedlot construction, and interim permits allowing feedlots with pollution problems to operate in a two-year period during which the problems are corrected.

There are two primary concerns and MPCA objectives for permitting feedlots and protecting water in our agricultural areas: ensuring that manure on a feedlot or manure storage area does not run into water; ensuring that nutrient-rich manure is applied to cropland at a rate, time and method that prevents nutrients and other possible contaminants from entering streams, lakes and ground water.

Proposed feedlots and existing operations planning to expand or construct should first contact the county feedlot officer and regional MPCA office. An initial inspection should be scheduled immediately after determining a livestock facility will be constructed. After conducting the inspection the county feedlot officer will notify the producer if and what permits are required.

One major hurdle in permitting and constructing feedlots in MN is completing an environmental assessment. Environmental Assessment Worksheets (EAWs) are mandatory for proposed feedlots or existing feedlot expansions over 1,000 AU, or over 500 AU in sensitive areas. 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. These assessments are expensive and take a long time to complete, typically taking 90 days to complete before the construction permit can be submitted to MPCA. All animals are added together in determining the site's size and the type of housing doesn't play a role in the regulations and construction permit requirements.

Each county in MN can also have different construction and zoning requirements and setbacks to follow on top of the state requirements. Separate county approval and permitting process can also be required for proposed or expanding livestock facilities.

It can be a bit overwhelming trying to understand all the regulations and the permitting process but it is important that producers realize they have options. I will be providing an overview of these options but every site and producer is different so I recommend contacting a consultant that specializes in animal feeding operations for site specific details.
When you have decided that you want to build a livestock facility there are two main questions that need to be considered: 1.) How many head will the facility be for? 2.) Where will the facility be located?

SITE RESTRICTIONS FOR LIVESTOCK FACILITIES

The MPCA has very few required setbacks for livestock facilities with most of the required setbacks being addressed at the county zoning level.According to MPCA regulations, all livestock facilities have required setbacks from open waters, wells, groundwater, and sinkholes/karst features.

New facilities cannot be constructed within afloodplain or a designated shore land area. Existing operations already located within shore land can expand but must be located further away from the shore land area. The separation distance to a domestic well varies from 50 to 150 feet depending on the proposed structure and the existing well. The separation to groundwater can be less but it comes with additional construction requirements and possible groundwater monitoring.

The location of the animal feeding operation structure is the biggest factor in determining the ease of obtaining Construction and Operating Permits.These setbacks vary with the different sizes of operations and since every county is different, the county feedlot officeror livestock consultant should be contacted directly to help determine suitable sites and required setbacks for proposed structures.

PERMIT APPLICATION REQUIRMENTS

Other than the siting requirements stated above all construction permit applications must also have a manure management plan (MMP) along with the construction specifications of the proposed structure. The MPCA also has multiple permit application forms that must be completed and included in the permit applications

MMP's plans help ensure that application rates do not exceed crop nutrient needs, and that setbacks from waters and drain tile intakes are observed. The MMP shows all the land that is available for application of the manure generated from the site. The cropland must be mapped to clearly show the location for application along with recent soil sample results indicating the residual nutrient contain of the soil to determine the amount of nutrients

that can still be applied for crop uptake. There are many benefits of having a MMP as commercial fertilizer is very expensive and manure is no longer considered a waste but a very valuable commodity. Over applying manure is a major mistake and wasteful. Having a MMP also allows land application to be exempt from proving a discharge.

The size of the proposed livestock facility determines the amount of construction specification detail needed to be included in theconstruction permit application. Smaller operations may not need MPCA Operation permits but may still need construction permits from the county zoning department. Larger operations are more closely reviewed by MPCA engineers and require full engineering plans, reports, and construction technical specifications for permit submittal. For these larger operations it takes longer to complete the engineering documents for submittal and typically longer for MPCA to review and permit the livestock facilities. Producers must figure at least 90 days for larger sites to get permitted and start construction. It is never too early to contact a professional consultant to at least start the conversation for a possible construction permit.

GRANT AND FINANCING OPTIONS AVAILABLE

There are mainly two options for funding the construction of cattle barns. The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) offers grant money through their Environmental Quality Incentives Program (EQIP). The MN Soil & Water Conservation Districts (SWCD) also has a low interest loan program, State Revolving Loan,for proposed animal feeding operation structures that improve water quality.

The NRCS EQIP program is fairly competitive and it can take time to be approved and funded. Every county is different but a top priority of the program is to close open lots and construct confinement barns. Producers compete with each other, with the site with the most problems and making the most improvements typically getting the highest priority. Projects in sensitive areas are also a high priority.

The EQIP application time period can take up to two years to complete. The first year the NRCS office requires a Facility Assessment to be completed which investigates the current feedlot site and the problems associated with the current feedlot site. The Facility Assessment is used to rank your proposed EQIP application for the proposed structures that will be built and hopefully funded the following year. Typically the NRCS will fund the Facility Assessment to be completed the first year with the EQIP application funding the following year if awarded.

If approved for EQIP, the structures must have engineering designs, plans, and specifications along with inspection and certification of the construction upon completion. A compressive nutrient management plan (CNMP) must also be completed which is a detailed manure management plan that also includes commercial fertilizer, dead animal handling, and other details of the operation included in the plan. The state has different payment rates each year and the amount it can fund so I encourage producers to contact the NRCS office immediately after they have discussed the possibility of a project to see if this grant money is available. Typically projects are funded only once per year in the spring and producers should be signed up by the middle of the winter for ranking. There are a few extra requirements with using NRCS funding but typically it is well worth the hassle when available.

The SWCD State Revolving Loan program is a low interest loan program created to help producers on projects that improve water quality. The loan interest rate is fixed at 3% for up to 15 years and only sites below 1,000 animals units qualify for the loan. The loan also cannot be used for expansions. The producer still works with its local banker but the SWCD will deposit funds equal to the principal amount of the loan at 0% interest. To obtain the loan producers must go to their local Soil & Water Conservation District to sign the application and provide an estimate of the project's construction cost. To obtain the loan the producer must also have engineering plans for the project and a MMP. The loan is available throughout the year. Upon completion and engineering certification of the project's construction the lender will receive the loan payment amount.

This may cause the producer to obtain a construction loan until the project's completion when the low interest loan funding is released.

SUMMARY

Even though they were above mentioned above, there are a couple of statements that I want to reiterate.

1.) When you have decided that you want to build a livestock facility there are two main questions that need to be considered: 1.) How many head will the facility be for? 2.) Where will the facility be located?
2.) Producers must figure at least 90-180 days for larger sites to get designed and permitted to start construction. Producers should contact the county feedlot officer immediately after they have decided to proceed with a proposed livestock facility. It is never too early to contact a professional consultant to at least start the conversation for a possible construction permit.
3.) It can be a bit overwhelming trying to understand all the regulations and the permitting process but it is important that producers realize they have options.
4.) Every site and producer is different so I recommend contacting a consultant that specializes in animal feeding operations for site specific details.

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