



PERMITTING & CONSTRUCTING

ANIMAL FEEDING OPERATIONS IN SOUTH DAKOTA

A whitepaper by:

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PERMITTING & CONSTRUCTING ANIMAL FEEDING OPERATIONS IN SOUTH DAKOTA

The regulations for concentrated animal feeding operations (CAFO's) in South Dakota (SD) are based on the federal Environmental Protection Agency (EPA) regulations. The South Dakota Department of Environment and Natural Resources (DENR) reviews and issues the permits required for all CAFO's in SD. The majority of all CAFO's in SD are issued one permit, a general storm water discharge permit which is similar to the federal National Pollutant Discharge Elimination System (NPDES) Permit.

The SD DENR and federal EPA regulations have one major objective; eliminate waste discharges to waters of the United States. Contaminated runoff must be contained and if structures cannot be constructed to completely eliminate the potential to discharge then the site may need to obtain an NPDES permit that will allow the site to discharge runoff during exceptionally large precipitation events. All CAFO's in SD are required to have a storm water discharge permit.

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. Proposed CAFO's and existing operations planning to expand or construct livestock facilities should first request an initial meeting with the county planning and zoning office prior to starting planning and permitting. This initial meeting should be scheduled immediately after determining a livestock facility will be constructed.

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

The county planning and zoning office has responsibility for implementing state feedlot regulations for facilities with fewer than 1,000 animal units (AU) and do not require federal permits. The county responsibilities include registration, permitting, inspections, assistance, and complaint follow-up. After working with the county on the proposed plans and determining the proper site location the final plans and permits should be completed and submitted to DENR. Final plans and permits can take up to 60 days for the permit to be approved and issued.

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 DENR has very few required setbacks for livestock facilities with most of the required setbacks being addressed at the county zoning level. According to DENR regulations, all livestock facilities have required setbacks from shallow aquifers, wells, floodplains, and groundwater. These setbacks are very straight forward with the distances the same for all sizes of operations.

New facilities cannot be constructed within the 100 year floodplain. The separation distance to a domestic well varies from 150 to 1,000 feet depending on the proposed structure and the existing well. Proposed structures not meeting the required separation distance to groundwater and located over a shallow aquifer can be accomplished but it comes with additional construction requirements and probable groundwater monitoring.

The location of the animal feeding operation structure is the biggest factor in determining the ease of obtaining a Construction Permit. Since every county is different, the county zoning office should be contacted directly to determine additional county based setbacks.

PERMIT APPLICATION REQUIREMENTS

Other than the siting requirements stated above all construction permit applications must also have a nutrient management plan (NMP) along with the construction plans and specifications of the proposed structures. The DENR also have multiple permit application forms that must be completed and included in the permit applications

The NMP 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 content of the soil to determine the amount of nutrients that can still be applied for crop uptake. There are many benefits of having a NMP 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 NMP also allows land application to be exempt from proving a discharge.

All proposed or expanding CAFO's are required to have a minimum of 270 days of manure storage. Dry bedding pack manure can only be stockpiled for 14 days, otherwise it needs to be covered or have its runoff contained. A permanent manure stockpile location needs a impervious liner to prevent seepage and it must be covered or have its runoff contained. Temporary stockpile locations are allowed for up to 90 days if its covered and if it meets separations distances and the stockpile location is moved to different sites.

The size of the proposed livestock facility determines the amount of construction specification detail needed to be included in the construction permit application. Smaller operations may not need a general storm water discharge permit but may still need construction permits from the county zoning department. Larger operations are more closely reviewed by DENR 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 DENR to review and permit the livestock facilities. Producers must figure at least 60 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 SD Department of Agriculture also has a low interest loan program known as Livestock Nutrient Management Program 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 ranking, review, and approval time period can take over a year to complete and get awarded funding. 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 comprehensive 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 Livestock Nutrient Management 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 animal 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 Farm Service Agency (FSA) office 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 must contact the DENR and the county 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.

For more information contact:

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