

Construction and Permitting Requirements for New or Expanding Livestock Facilities in Wisconsin

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INTRODUCTION

Construction and permit requirements for new or expanding livestock operations in the state of Wisconsin can vary significantly based on a multitude of factors including (but not limited to): the number of animal units housed by the operation or local acceptance of state siting requirements. Based upon varying criteria, developing an understanding of the construction and permit requirements specific to a new or expanding livestock facility may prove to be a difficult task.

Fortunately, for Wisconsin livestock producers, there are licensed professional engineers who specialize in navigating the complexities of the permit and construction requirements associated with new or expanding livestock facilities. Contracting with and utilizing the services of an engineer may not only be required but also has the potential to save a significant amount of time and frustration during the planning, design, and approval of a project.

This white paper has been developed to provide a brief overview of some general requirements that may influence or affect planning a new livestock production site or an expansion of an existing livestock production facility.

CONSTRUCTION REQUIREMENTS

All construction associated with waste storage or waste transfer systems in the state of Wisconsin must be in conformance with Natural Resources Conservation Service (NRCS) technical standards and construction specifications (if applicable) regardless of whether NRCS has provided cost sharing via the Environmental Quality Incentives Program (EQIP) or has involvement in the project.

The construction of animal housing facilities in Wisconsin is not governed by NRCS technical standards or construction specifications.

Example: a producer seeks to construct an indoor cattle feeding facility with a slatted floor and a below building concrete waste storage tank. In this instance, the construction of the barn itself would not be governed by NRCS technical standards or specifications; however, the concrete waste storage tank design and construction must be in conformance with NRCS technical standard 313 "Waste Storage Facility" and all applicable construction specifications. NRCS technical standard 313 does not require minimum waste storage duration. Minimum waste storage duration of waste storage structures is required only by Wisconsin Department of Natural Resources (WDNR) in the case of CAFOs (facilities having greater than 1,000 animal units).

On-site observation and documentation of construction activities by an engineer or a representative of the engineer is required by governing state or federal agencies (i.e. WDNR or NRCS) and is required in most instances by local

government ordinance. Following the completion of construction, the engineer will compile construction phase documentation to prepare a construction certification report including as-built drawings to be submitted to each applicable federal, state, and/or local agency.

PERMITTING REQUIREMENTS

Animal Feeding Operations (AFO - Operations having less than 1,000 animal units)

AFO facilities are governed by the county and/or township in which they are located. In many instances, the land conservation department within the county government has an animal waste ordinance in place that is responsible for implementing runoff rules, reviewing construction plans, and granting approval for AFO projects. The land conservation department is also responsible for granting permits including, but not limited to, animal waste storage impoundment permits. Counties or townships may also have additional zoning requirements or permits including, but not limited to, building permits for animal housing structures. Permit requirements and permit fees vary significantly on a county-by-county basis.

AFO facilities may also fall under the guidance of the Wisconsin livestock facility siting law standards, more commonly referred to as ATCP 51 standards. The livestock siting law establishes a predictable siting process and standards to protect water quality as well as air quality.

The siting law standards apply to new and expanding livestock facilities in areas that require local permits, and then, only if those facilities will have 500 animal units or more or expand by at least 20%. Towns and counties have the option to adopt an ordinance under the siting law that requires a permit for facilities meeting the previously mentioned criteria. Those permits are issued under a licensing ordinance or as a conditional use permit under a zoning ordinance.

A nutrient management plan, signed by a qualified Nutrient Management Planner, is required to accompany the submittal of the ATCP 51 application for local approval. The application for local approval must also include an evaluation of all existing waste storages and a runoff management evaluation. Each must be signed by a licensed professional engineer.

It is important to note that not all county or township governments regulate livestock siting. An interactive map of counties and townships that have adopted an ordinance requiring permit approval to build or expand a livestock facility can be found at: <http://datcpgis.wi.gov/livestock/>.

It is highly recommended that no construction activities commence until the required siting, county, and township permits have been obtained.

Confined Animal Feeding Operations (CAFO - Operations having 1,000 animal units or more)

All CAFO facilities must be permitted by the WDNR. All CAFO facilities are required to obtain and maintain an approved Wisconsin Pollutant Discharge Elimination System (WPDES) permit. All WPDES permitted facilities are required to have minimum 180 day liquid waste storage duration (i.e. slatted floor/below building tank) or 60 solid waste storage duration (i.e. solids stacking area).

For existing AFO operations or new operations seeking to expand up to or exceed 1,000 animal units, the steps for obtaining a WPDES permit are as follows:

- Preliminary WPDES Permit Application - A producer may work independently or with an engineer to complete and submit a preliminary application (available from WDNR) to WDNR at least 12 months prior to the time the operation is to reach or exceed 1,000 animal units. A 5 year projection of expansions and/or increases in animal numbers must accompany the preliminary application. Upon receipt of the preliminary application, WDNR will schedule a “walk over” of the existing site to determine feasibility and limitations and to provide additional information for the final application.
- Final WPDES Permit Application – Producers must work with a licensed professional engineer to complete and submit the final application at least 180 days prior to the time that the operation is to reach or exceed 1,000 animal units. The final WPDES permit application submittal must include:
 - A complete engineering report with management and site assessments, operation and maintenance plan, construction quality assurance plan, engineering design calculations, construction specifications, and final construction plans stamped by a licensed professional engineer.

The County Land Conservation Department may review the engineering report and final construction plans in concurrence with WDNR and submit any questions or concerns to the producer, engineer, or WDNR. It is the responsibility of the WDNR to issue approvals for CAFO facilities.

- Engineering evaluations of all existing reviewable structures and systems on site.
- A new or updated nutrient management plan developed in accordance with proposed animal numbers. The nutrient management plan must include a monitoring and inspection

program and annual reports to summarize land application activities.

- An environmental assessment may be required at the discretion of WDNR.
- A further requirement of the final application phase is a mandatory public notice and comment period on the conditions of all WPDES permits. If warranted by public comment, the WDNR has authority to also hold a public hearing on the conditions of a WPDES permit. Final WPDES permits are issued following the conclusion of the public notice and comment period. The issuance of final WPDES permits by WDNR does have potential to be impeded contingent on WDNR response to public comment or required additional action by WDNR.
- Facilities with WPDES permits in place must complete and submit a permit reissuance application every 5 years (starting from the date of initial permit issuance). WDNR must be notified of any proposed construction or management changes.
- WDNR maintains a list of “CAFO reviewable project/structure” types. The proposed construction of reviewable projects or structures requires that a complete engineering report and construction plans, as described above, be submitted to WDNR for review. WDNR maintains a 90 day period from receipt of the engineering report and construction plans to complete their review and issue approval.
- WPDES CAFO Reviewable Project/Structure Types:
 - Evaluation of existing facilities and structures
 - New runoff control systems (or modifications to existing systems)
 - New manure storage structures (or modifications to existing storage structures)
 - New storages for process wastewater (or modifications to existing storages)
 - New manure transfer pipes, channels, or reception tanks (or modifications to existing transfer systems)
 - New feed storage areas (or modifications to existing feed storage areas)
 - Non-ag waste additions to storage or treatment systems, including digesters
 - Closure or discontinuing use of an existing reviewable system or structure
 - Permanent spray irrigation or other land application systems
 - Compost facilities

- Animal housing facilities are not considered to be CAFO reviewable projects/structures therefore WDNR review and approval is not required for the construction of the barn itself. However, waste storage or transfer systems or other structures listed above that are planned within or associated with the animal housing facility are considered reviewable and are subject to WDNR review and approval.

Animal housing facilities may be reviewable by the county or township government and will need a building permit.

Example: A producer wishes to construct a new 1,500 head bedded pack indoor cattle feeding facility with a concrete scrape lane inside the barn, a walled concrete manure stacking area located outside the barn, and a feed storage area. If not already permitted, the producer is required to obtain a WPDES permit (in accordance with the guidelines listed above) due to having greater than 1,000 animal units. Design of the scrape alley (waste transfer structure), stacking area (waste storage structure), and feed storage area all must be reviewed and approved by WDNR. The design of the barn structure does not require WDNR review. County and/or township waste storage and building permits will likely apply. A WDNR stormwater permit may also apply.

- Any construction activities beyond clearing, grubbing, and rough grading for CAFO reviewable facilities prior to WDNR plan approval is a violation of WI administrative code and may subject the operation to penalty including, but not limited to, complete removal of all unapproved constructed structures.
- It is highly recommended that no construction activities commence until the required WPDES, county, and township permits have been obtained.

Additional WDNR permitting requirements for construction projects may include, but are not limited to:

- General Stormwater Permit – an operation (AFO or CAFO) must apply for and obtain a general stormwater permit if one (1) or more acres are to be disturbed during construction activities. Permit must be obtained from WDNR prior to commencing construction activities.
- High Capacity Well Permit – an operation (AFO or CAFO) must apply for and obtain a high capacity well permit if the operation uses 70 gallons per minute or more from all private wells on site.
- Stream Alteration Permit – an operation (AFO or CAFO) must apply for and obtain a permit prior to diverting a waterway or altering stream course.

WPDES permitted CAFO facilities located in areas where a siting law ordinance has been adopted are subject to ATCP 51 requirements and permits. A copy of the facility's WPDES permit may be substituted in place of select sections of the ATCP 51 application for local approval.

CONCLUSIONS AND RECOMMENDATIONS

When in doubt regarding an expansion or addition to a livestock facility, consult with the county land conservation department, WDNR regional stormwater contact, local NRCS personnel, or an engineer to determine the construction and permitting requirements specific to the proposed site and for completion of the planned project. It is important to consider that time taken up front to comply with the rules and regulations applicable to the facility has potential to far outweigh costs associated with later revisions or repairs and allows for faster more efficient implementation and use of the new facility.