

ENVIRONMENTAL ANALYSIS AND DECISION ON THE NEED
FOR AN ENVIRONMENTAL IMPACT STATEMENT (EIS)

Form 1600-008

Rev. 7-2006

Department of Natural Resources (DNR)

Region or Bureau
Watershed Management

Type List Designation
NR 150.03(8)(i)2.b

NOTE TO REVIEWERS: This document is a DNR environmental analysis that evaluates probable environmental effects and decides on the need for an EIS. The attached analysis includes a description of the proposal and the affected environment. The DNR has reviewed the attachments and, upon certification, accepts responsibility for their scope and content to fulfill requirements in s. NR 150.22, Wis. Adm. Code. Your comments should address completeness, accuracy or the EIS decision. For your comments to be considered, they must be received by the contact person before 4:30 p.m., April 23, 2010.

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Applicant: State of Wisconsin, Department of Natural Resources

Address: Madison, WI

Title of Proposal: Small or Medium Concentrated Animal Feeding Operation (CAFO) WPDES General Permit

Location: County: All City/Town/Village: All

Township Range Section(s): All

PROJECT SUMMARY

1. Brief overview of the proposal including the DNR action

The Wisconsin Pollutant Discharge Elimination System (WPDES) permit program is a water quality protection program designed to limit pollutant discharges from point source discharges to waters of the state which includes, among other things, paper mills, municipal wastewater treatment plants and Concentrated Animal Feeding Operations (CAFOs). Based on discharges to waters of the state, livestock operations in the state of Wisconsin that have fewer than 1,000 animal units (see table below) may be defined as a medium CAFO or may be designated by the DNR as a small or medium CAFO, and may be required to apply for and obtain a WPDES permit. WPDES permits for CAFOs have permit restrictions unique to this type of point source which rely primarily on the implementation of best management practices (BMPs) outlined in ch. NR 243, Wis. Adm. Code, to protect water quality. Ch. NR 243 outlines the water quality protection requirements that apply to small and medium CAFOs. Revisions to ch. NR 243, Wis. Adm. Code, promulgated in July of 2007, facilitated the issuance of a GP for small and medium CAFOs by (1) outlining the GP application process for livestock operations and (2) creating more standardized and protective permit requirements that lend themselves to inclusion in a GP.

	# of animals equivalent to	# of animals equivalent to
DAIRY CATTLE	299 AUs	999 AUs
Milking and Dry Cows	209	699
Heifers (800 to 1200 lbs)	299	999
Heifers (400 to 800 lbs)	299	999
Calves (under 400 lbs)	1495	4999
VEAL CALVES		
Per Animal	299	999
BEEF CATTLE:		
Steers or Cows (400 lbs to Mkt)	299	999
Calves (under 400 lbs)	1495	4999
SWINE:		
Pigs (55 lbs to Mkt)	213	2499
Pigs (up to 55 lbs)	2990	9999
SHEEP:		
Per Animal	2990	9999
HORSES:		
Per Animal	149	499
DUCKS:		
Per Bird (Non-liquid poultry manure handling)	8978	29999
CHICKENS:		
Layers (Non-liquid poultry manure handling)	24308	81999
Broilers and Pullets (Non-liquid poultry manure handling)	37375	124999
TURKEYS:		
Per Bird	16611	54999

(See ch. NR 243.05, Wis. Adm. Code, Table 2A and 2B, for a complete listing of animal types)

This environmental assessment is associated with the first time issuance of a Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit for Small or Medium Concentrated Animal Feeding Operations. Under state and federal law, the Department can require permit coverage for certain livestock operations with fewer than 1,000 animal units. There are approximately 14,000 livestock operations in the state of Wisconsin with fewer than 1,000 animal units. However, a small subset of this number is actually subject to WPDES permitting. This includes:

Medium CAFOs (300-999 animal units)

- Operations with certain production area (where animals are housed, feed is stored and manure and process wastewater are stored) discharges to navigable waters
- Operations designated by the Department as a medium CAFO based on significant production area discharges to navigable waters
- Operations designated by the Department as a medium CAFO based on non-agricultural stormwater discharges of manure or process wastewater to navigable waters associated with land application activities
- Operations designated by the Department as a medium CAFO that have caused the fecal contamination of a well

Small CAFOs (1-299 animal units)

- Operations designated by the Department as a small CAFO based on significant production area discharges to navigable waters
- Operations designated by the Department as a small CAFO based on non-agricultural stormwater discharges of manure or process wastewater to navigable waters associated with land application activities
- Operations designated by the Department as a small CAFO that have caused the fecal contamination of a well

Historically, the Department has issued very few WPDES permits to small or medium livestock. While this is expected to continue, there will likely a slight increase in the number of permits issued to small or medium livestock operations that meet the above criteria and the Department has determined that permit coverage is warranted and necessary. The permit can be used to cover all livestock types provide the other GP permit criteria apply.

Similar to the process for the issuance or reissuance of an individual CAFO WPDES permit, the WDNR will public notice the proposed issuance of the Small or Medium CAFO WPDES GP. Unlike an individual CAFO WPDES permit which is public noticed in the area where the operation will be located, the WDNR will notice the CAFO WPDES GP on a statewide basis. During the public

comment period the WDNR will accept comments on the proposed GP and Environmental Assessment. The WDNR will also likely hold five public hearing (list locations?) throughout the state,. Once the CAFO GP is issued, the Department will be able to cover operations that have discharges that warrant permit coverage on a statewide basis.

2. List the documents, plans, studies or memos on which this DNR review is based

- Ch. NR 243, Wis. Adm. Code.
- The proposed permit and briefing memo describing the types of operations regulated by this permit are attached.
- Environmental Assessment for a General WPDES Permit for Large CAFOs

DNR EVALUATION OF PROJECT SIGNIFICANCE

3. Environmental Effects and Their Significance

- a. Discuss which of the primary and secondary environmental effects listed in the supporting documents are long-term or short-term.

The issuance of the Small or Medium CAFO GP will not result in the creation of new operations or discharges. The primary reason for issuing this Small or Medium CAFO GP is to address and place restrictions on discharges at existing operations that are already occurring and need to be addressed to protect water quality. The conditions contained in the GP requiring proper handling, storage and land application of manure and process wastewater are intended to minimize the likelihood of short and long-term impacts. Because the permit is intended to address discharges that previously have not been addressed, it would ultimately have a beneficial short and long-term impact on the environment.

Although the permit is effective statewide, the benefits of the permit are likely to be localized to those areas near where a given operation is covered under the GP. Depending on the location of the operation's discharges within a streams subwatershed, and the size of the stream, addressing the discharge could have significant beneficial impacts. Wisconsin will continue to rely primarily on non-WPDES regulatory programs and voluntary programs to address impacts from livestock operations with fewer than 1,000 animal units.

- b. Discuss which of the primary and secondary environmental effects listed in the supporting documents are effects on geographically scarce resources (e.g. historic or cultural resources, scenic and recreational resources, prime agricultural lands, threatened or endangered resources, or ecologically sensitive areas).

Given that the Small or Medium CAFO GP can only be issued to existing operations with existing discharges, primary and secondary impacts to geographically scarce resources are not expected.

- c. Discuss the extent to which the primary and secondary environmental effects listed in the supporting documents are reversible.

See response to b.

4. Significance of Cumulative Effects

Discuss the significance of reasonably anticipated cumulative effects on the environment (and energy usage, if applicable). Consider cumulative effects from repeated projects of the same type. Would the cumulative effects be more severe or substantially change the quality of the environment? Include other activities planned or proposed in the area that would compound effects on the environment.

Given that the Small or Medium CAFO GP can only be issued to existing operations with existing discharges, it is expected that the only cumulative impacts would be beneficial. If existing discharges from a number of livestock operations in a given area are addressed, whether via WPDES permits or other regulatory/voluntary programs, the potential beneficial impacts to waters of the state in the area could be significant.

5. Significance of Risk

- a. Explain the significance of any unknowns that create substantial uncertainty in predicting effects on the quality of the environment. What additional studies or analysis would eliminate or reduce these unknowns?

Under the WPDES permit program, an operation's existing manure/process wastewater storage facilities and runoff control systems) will be evaluated either prior to issuance of the proposed permit or as part of a permit schedule to determine if they have been built in accordance with currently accepted standards. If the facilities fail to meet current standards the operator will be required to upgrade the facilities to meet current standards in accordance with a schedule in their proposed WPDES permit.

Current regulations require that there be no discharge of pollutants from any manure storage facilities, outdoor animal lots, composting and leachate containment systems, milking center wastewater treatment/containment systems, raw material storage areas, or other area of the operation to navigable waters, except in the event a 25-year, 24-hour rainfall event, or a chronic rainfall event, causes a discharge of pollutants to navigable waters from a facility, structure or area which is properly designed for a 25-year, 24-hour rainfall event. In addition, current regulations prohibit 1) overflow of manure storage facilities, 2) direct runoff from a feedlot or stored manure to waters of the state, 3) unconfined manure piles/stacks in water quality management areas, and 4) unlimited access by livestock to waters of the state in locations where high concentrations of animals prevent maintenance of adequate sod cover.

Any structures that will be needed to comply with permit requirements, will need to be built in accordance with currently accepted standards to minimize the risks of ground and surface water contamination. Plans and specifications for proposed facilities must be reviewed and approved by Department staff prior to construction.

Ensuring that storage facilities and runoff control systems meet currently accepted standards is intended to address possible adverse impacts to ground and surface waters. Once an operation is covered under a WPDES permit, the operation will be required to obtain Department approval of all proposed new storage and runoff control facilities prior to construction to ensure that the facilities meet current standards.

Operations covered under a WPDES permit must comply with permit requirements and associated Nutrient Management Plan (NMP) requirements regardless of cost-sharing. NMPs outlines how, when, where and in what amounts manure and process wastewater will be land applied. Operations getting covered under the GP may not have previously had an NMP or may have had an NMP with land application practices that are not as protective of water quality as WPDES landspreading requirements.

Consequently, covering of an operation under the GP should not yield any substantial increase in risk to the environment and should, in fact, reduce environmental risks.

The nutrient content of manure temporarily stored in an operation's manure storage facility may vary. Unidentified variations in nutrient content may result in over-application of nutrients (nitrogen in particular) that could impact groundwater. The WPDES permit issued to this operation will require manure and soil testing to ensure this does not occur.

Perhaps the most significant unknowns in predicting effects on the quality of the environment is the expected level of compliance from operations covered under the permit. Permit noncompliance can result in significant impacts to the environment and in certain instances, an operation's lack of effort to comply with state rules for agriculture likely led to permit coverage. However, one of the key components of the WPDES permit program is the creation of clear performance expectations that are subject to enforcement. Enforcement actions can range anywhere from a phone call to a referral to the Department of Justice. The clear enforcement authority is a significant contributor to the success of the WPDES permit program and will help minimize uncertainty associated with permit compliance.

These factors are sufficient to indicate that the risk of environmental harm is not significant.

- b. Explain the environmental significance of reasonably anticipated operating problems such as malfunctions, spills, fires or other hazards (particularly those relating to health or safety). Consider reasonable detection and emergency response, and discuss the potential for these hazards.

Possible operating problems that could impact the environment include failure of manure handling and storage facilities or poor land application practices that lead to nutrient runoff to surface waters or leaching of nutrients to groundwater. However, these impacts are expected to be reduced, not increased, as a result of issuance of the GP.

For operations where the Department deems GP coverage to be warranted, the Department will review proposed manure storage facilities and evaluate existing manure storage facilities to ensure that they are appropriately designed (for example, berm slopes and storage volume). This makes the probability of failure of storage facilities highly unlikely. In addition, the operation will need to have an emergency response plan to address small and large-scale manure spills. Some small "spills" may not represent an immediate environmental impact but may need to be addressed by the operation (e.g., scraping areas where small amounts of "spilled" manure have collected, changing operating procedures to avoid small "spills") to ensure that impacts to waters of the state, primarily through runoff resulting from storm events, do not occur. Massive failure of the manure storage facility would likely be formally defined as a spill under Ch. NR 706, Wis. Admin. Code. Chapter NR 706 describes requirements for immediate notification of the Department in the case of a spill. A requirement to follow Ch. NR 706 is included in the proposed WPDES permit. Inappropriate or inadequate responses (i.e., time frame of response and action taken to eliminate or mitigate environmental impact) to spills and associated environmental impact are subject to Department enforcement. However, Department and permittee action is contingent on a case-by-

case evaluation of actual environmental impact and correction actions taken by the operation.

Department inspections based on complaints or general compliance efforts will help to serve to evaluate whether the operation is properly addressing minor "spills." In addition, the operation will be required to conduct inspections of storage facilities to ensure that more significant problems are addressed prior to any sort of massive facility failure.

Manure and process wastewater will be landspread in accordance with a Department approved Nutrient Management Plan, which will does not allow poor land application practices; thus, the GP should help ensure that operating practices at permitted livestock operations should have minimal impact on the environment.

6. Significance of Precedent

Would a decision on this proposal influence future decisions or foreclose options that may additionally affect the quality of the environment? Describe any conflicts the proposal has with plans or policy of local, state or federal agencies. Explain the significance of each.

No. The Department already has the authority to issue an individual WPDES permit to small or medium CAFOs. The issuance of the GP for small or medium CAFOs does not preclude the Department or other agencies from using other means to address discharges from these operations. The Department is not required to cover all operations under the GP and does not intend to do so. The Department expects that impacts from most small and medium operations will continue to be addressed via current methods (e.g., NR 151, local ordinances, EQIP); however, the GP can be used in those instances where WPDES permit coverage is warranted.

The Department primarily considered issues that fall under our regulatory authority as part of this analysis. The project is not known to conflict with plans or policy of local, state, or federal agencies. Operations covered under the GP will need to apply for and receive the appropriate approvals from all agencies when necessary. Permitting this operation would not foreclose future options for taking necessary actions to protect the environment (i.e., issuance of an individual permit). In actuality, through enforcement of the WPDES permit, the Department has a means to avoid or address possible environmental impacts associated with the operation.

7. Significance of Controversy over Environmental Effects

Discuss the effects on the quality of the environment, including socio-economic effects, that are (or are likely to be) highly controversial, and summarize the controversy.

There is not expected to be significant controversy over the issuance of this GP. Public advocacy groups are likely to support the issuance of the permit in order to ensure water quality impacts from certain smaller-scale livestock operations are addressed. The most likely source of controversy will be the livestock industry. Livestock operations and their representatives will likely express concerns over the potential impacts associated with coverage under the permit (e.g., construction of storage and runoff control systems, development and implementation of an NMP). However, the Department already has the authority to issue these operations an individual permit that would require the same actions on behalf of smaller-scale operations that warrant coverage under the GP.

ALTERNATIVES

8. Briefly describe the impacts of no action and of alternatives that would decrease or eliminate adverse environmental effects. (Refer to any appropriate alternatives from the applicant or anyone else.)

Don't issue the Small or Medium CAFO GP: Failure to issue the GP does not preclude the Department from issuing an individual permit to an operation to address discharges to water quality. However, this may inhibit the Department from issuing permit coverage due to workload constraints and may result in continued discharges to the environment.

Issue separate permits for small and medium operations/Issue separate permits for different livestock types: Given that permit requirements for all animal types and sizes of operation below 1,000 animal units should not differ, one permit for all operations with fewer than 1,000 animal units is warranted.

Include permit requirements that are more restrictive than NR 243: NR 243 contains requirements that have been deemed protective of water quality. However, there a limited number of permit requirements that clarify or are more restrictive than NR 243 that have been included in the GP because the Department has deemed them necessary to protect water quality.

DECISION (This decision is not final until certified by the appropriate authority)

In accordance with s. 1.11, Stats., and Ch. NR 150, Adm. Code, the Department is authorized and required to determine whether it has complied with s.1.11, Stats., and Ch. NR 150, Wis. Adm. Code.

Complete either A or B below:

A. EIS Process Not Required

The attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion, therefore, an environmental impact statement is not required prior to final action by the Department.

B. Major Action Requiring the Full EIS Process

The proposal is of such magnitude and complexity with such considerable and important impacts on the quality of the human environment that it constitutes a major action significantly affecting the quality of the human environment.

Signature of Evaluator	Date Signed
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Number of responses to news release or other notice:

Certified to be in compliance with WEPA	
Environmental Analysis and Liaison Program Staff	Date Signed

NOTICE OF APPEAL RIGHTS

If you believe you have a right to challenge this decision made by the Department, you should know that Wisconsin statutes, administrative codes and case law establish time periods and requirements for reviewing Department decisions.

To seek judicial review of the Department's decision, ss. 227.52 and 227.53, Stats., establish criteria for filing a petition for judicial review. Such a petition shall be filed with the appropriate circuit court and shall be served on the Department. The petition shall name the Department of Natural Resources as the respondent.