ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
REPEALING AND RECREATING RULES

The Natural Resources Board proposes an order to repeal and recreate ch. NR 243 relating to animal feeding operations

WT-21-05

Analysis Prepared by Department of Natural Resources

1. Statutes Interpreted: ss. 281.11, 281.12, 281.16, 281.19, 281.20, 281.41, 281.65, 281.96, 281.97, 281.98, 283.001, 283.01, 283.11, 283.13, 283.19, 283.31 283.35, 283.37, 283.53, 283.55, 283.59, 283.63, 283.83, 283.87, 283.89, 283.91, Stats.

2. Statutory Authority: ss. 227.11(2), 281.16, 281.19, 281.41, 281.65, 283.001, 283.11, 283.13, 283.31, 283.37, Stats.

3. Explanation of agency authority: Pursuant to ss. 283.01(12) and 283.31, Stats., the Department has the authority to regulate animal feeding operations defined or designated as concentrated animal feeding operations (CAFO) as point sources under Wisconsin's pollutant discharge elimination system (WPDES) permit program. The statutory provisions referenced above give the Department the authority to promulgate rules to administer the WPDES permit program for CAFOs. Also, more specifically, the Department has the authority under s. 283.11(1), Stats., to promulgate rules that incorporate requirements established by the U.S. environmental protection agency (EPA). The Department's proposed rules incorporate the federal regulations established in 40 CFR parts 122 and 412 that regulate CAFOs. The Department's proposed rules also establish requirements that go beyond the federal requirements. The Department recognizes that s. 283.11(2), Stats., places some limitations on Department regulation of point sources, principally with respect to technology based requirements (Note: case law has clarified the scope of this statutory provision [Maple Leaf Farms v. DNR, 247 Wis.2d 96, 633 N.W. 2d 720]). Section 283.11(2), Stats., does not, however, preclude regulation in instances in which (1) there is an absence of federal regulation, (2) the regulations are needed to achieve water quality standards, or (3) the regulations are associated with protecting groundwater, which is not covered by the Clean Water Act and federal regulations, but is covered by ch. 283, Stats.

Finally, part of subchapter III of the proposed rules cover implementation of the state performance standards and prohibitions established in ch. NR 151. The Department's authority to establish rules to implement these standards and prohibitions is established under 281.16, Stats.

4. Related statute or rule: ss 281.15, 281.31, 281.77, Stats., and chs. NR 2, 102, 103, 104, 108, 113, 140, 150, 151, 153, 154, 200, 203, 204, 205, 207, 214, 216, 218, 219, and 220.

5. Plain language analysis:

Subchapter I - General

The Department is repealing and recreating chapter NR 243 to incorporate revisions to federal NPDES regulations for CAFOs (large, medium and small CAFOs) and to include additional

requirements to protect groundwater and surface waters in the state. The Department is not proposing any significant changes to existing requirements in chapter NR 243 related to implementation of statewide livestock performance standards and prohibitions.

The Department is delegated by EPA to administer the NPDES permit program for CAFOs through the Department's WPDES permit program established in ch. NR 243 and ch. 283, Stats. Federal and state CAFO rules address water quality impacts from the animal production area (those areas associated with production of animals including animal housing areas, manure storage facilities and runoff control systems), areas ancillary to the production area, and land application areas. While EPA's authority under the NPDES permit program is limited to addressing waters of the U.S. (essentially navigable waters), pursuant to the WPDES permit requirements in ch. 283, Stats., the Department is charged with addressing impacts to all waters of the state, including wetlands, groundwater and all surface waters.

Under federal and state law, all CAFOs are point sources. CAFOs fall into three categories: (1) Large CAFOs, or operations with 1000 animal units or more. (2) Medium CAFOs, or operations with 300 to 999 animal units, that have a discharge to navigable waters from the production area that meets certain criteria. (3) Designated CAFOs. Designated CAFOs include Medium and Small CAFOs (operations with fewer than 300 animal units) that are designated by the Department on a case-by-case basis as having a significant discharge. Once an operation is defined or designated as CAFO and issued a WPDES permit, impacts to all waters of the state are addressed in the permit.

Primary changes to existing rules in subchapter I: The existing rules had one calculation method, a combined animal unit calculation, that was used to determine the number of animal units (size) at an operation. Under the combined method, the total number of animal units at an operation is based on the combined animal unit equivalency numbers for all animal species, mature and immature, present at the operation, including animals at different sites that are considered to be part of the same operation. The proposed rule retains the existing method and adds a second method for calculating the number of animals. The second method is based on recently revised federal regulations. In this federal method, the animal types are <u>not</u> added together to determine the total; however some animal types (e.g., veal calves, heifers, layer operations with dry manure handling), have larger animal unit conversion factors than under the current rule. The rule procedures require the Department to compare the calculations under both methods, and use the highest calculated value to determine the size of an operation. Also, this rule package adds a definition for "agricultural stormwater discharges." This term was added based on recently revised federal regulations.

Both the existing and proposed code allow variances to non-statutory and federal requirements.

<u>Subchapter II – Requirements for Large Concentrated Animal Feeding Operations</u>

This subchapter outlines the requirements specific to Large CAFOs (animal feeding operations with 1000 animal units or more). The proposed rule contains WPDES permit application requirements. The existing rules established a duty to apply for a permit based solely on whether an animal feeding operation had 1000 animal units or more. This proposed rule requires that an animal feeding operation with 1000 animal units or more apply for a permit if the operation will store manure or process wastewater in a structure that is below or at grade, or if the operation will land apply manure or process wastewater. Both the existing rule and the proposed rule do not allow large CAFOs to discharge to waters of the state without WPDES permits. For new operations, the existing rule requires that a complete application be submitted 12 months in advance of populating to 1000

animal units. For first-time permit applicants, this rule package requires that a general application with basic operational information (e.g., type of operation, anticipated number of animal units) be submitted 12 months prior to the anticipated date of becoming a large CAFO. A final complete permit application must then be submitted 6 months prior to becoming a large CAFO. Compared to existing rules, the proposed rules are more specific regarding the type of information that must be submitted in the final application, including a complete nutrient management plan. Reissuance applications are due 180 days prior to permit expiration. The proposed rules also include a change to the application requirements for existing animal feeding operations that become CAFOs due to the purchase of another operation. These expanded operations will have 90 days to submit an application to the Department. Although the Department always had the authority to issue general permits to cover CAFOs, the existing rules in chapter NR 243 did not include any specific requirements for general permits. The proposed rule includes specific application requirements for general permits. The Department can cover an operation under either an individual or general WPDES permit.

The rule package includes standard WPDES permit requirements. Some of these standard WPDES permit requirements for large CAFOs include:

- Permittees may not have a discharge from the animal production area (areas of an operation directly connected to production of animals including manure, process wastewater and feed storage areas as well as areas where animals are fed, maintained or confined) to navigable waters, except when an overflow of a structure occurs as the result of a 25-year, 24-storm event. This standard applies to dairy and cattle operations and most duck swine, poultry and veal operations. Compared to the existing rule, the changes to this production area standard is minor (e.g. discharge only allowed if it is an overflow event). The proposed rule does add new standards for other types of operations. For example, there are new standards included in the rule for other types of operations such as certain duck operations and horse and sheep operations as well as new standards for new source swine, veal or poultry CAFOs. New source CAFOs that are swine, veal or poultry may not have any discharges from the production area and they must meet a production area design requirement of a 100-year, 24-hour storm event. This provision is often referred to as the "no discharge" standard for navigable waters, and is consistent with federal standards. All permitted discharges from the production area must still comply with water quality standards.
- Permittees must develop an emergency response plan to address unauthorized spills or discharges.
- Permittees must control contaminated runoff from ancillary service and storage areas, including CAFO vegetated areas that are not part of the production area.
- Permittees shall manage animal mortality to ensure compliance with the "no discharge" standard and avoid impairments of other waters of the state.

In the existing and proposed rule, permittees must develop and implement a nutrient management plan that addresses the land application of manure and process wastewater generated by a CAFO. As a minimum requirement, the existing rule requires compliance with NRCS Standard 590 (1999). The proposed rule requires compliance with the updated technical standard for nutrient management planning--NRCS Standard 590 (2005). However, both the existing rule and proposed rule revisions require additional practices beyond NRCS Standard 590. The additional practices or restrictions are included for WPDES permittees for the purpose of complying with federal regulations, protecting water quality (both surface waters and groundwater) and minimizing runoff of manure and process wastewater pollutants. Some of the key provisions of the proposed rule that address land application activities (that deviate from NRCS 590) include the following:

- Manure or process wastewater may not pond on the site where it is applied.

- Manure or process wastewater may not run off the application site or discharge to waters of the state via subsurface drains under dry weather conditions or due to precipitation events less than the 25-year, 24-hour storm event. This is a change from the current rule requirement that does not allow run off of manure or process wastewater from the application site at any time. The proposed rule also contains a new requirement that prohibits surface applications of manure and process wastewater in response to forecasts of precipitation capable of producing runoff in the 24-hour period following application.
- 2nd year manure crediting is required.
- CAFOs must implement additional practices when applying manure and process wastewater within the Surface Water Quality Management Area, or SWQMA (1000 feet of a lake, 300 feet of a stream) in order to comply with the federal setback requirement and to protect against acute runoff events. Compared to the existing rule, these are new requirements.
- The proposed rule requires CAFOs statewide to limit phosphorus applications in accordance with the soil test phosphorus or Phosphorus Index method outlined in NRCS Standard 590. Additional phosphorus restrictions apply to fields with high soil test levels (greater than 100 ppm). In the existing rule, the Department only required phosphorus based plans on a case-by-case basis in certain watersheds and did not specify a method of limiting phosphorus delivery.
- Additional restrictions on winter land application of solid manure are proposed. Under the existing rule, restrictions on the land application of solid manure were imposed on a case-by-case basis in certain watersheds. Under the proposed rule, operations may choose to surface apply solid manure on frozen or snow-covered ground provided they follow certain restrictions in ch. NR 243. Beginning January 1, 2008, solid manure may not be surface applied on frozen ground or areas of fields with an inch of snow or more during the months of February and March, the months of the winter when manure runoff events are most probable. Operations may choose to either stack the solid manure or construct a storage facility to avoid surface applications during February and March. Solid manure may be incorporated under frozen or snow covered ground conditions at any time provided it is done properly and is physically possible.
- Additional restrictions on winter applications of liquid manure are proposed. Under the existing rule, restrictions on the land application of liquid manure were imposed on a case-by-case basis in certain watersheds. Under the proposed rule, liquid manure may not be surface applied during the months of February and March. In addition, by January 1st, 2010, all existing source CAFOs must have 180 days of liquid manure storage and will be prohibited from surface applying liquid manure on frozen or snow-covered ground throughout the winter. New source CAFOs are subject to these winter land application restrictions upon permit issuance. However, the rule provides allowances for surface applications of liquid manure on frozen or snow-covered ground during certain emergency situations. Liquid manure may be incorporated or injected under certain frozen or snow covered ground conditions provided it is done properly and is physically possible.
- The proposed rule also includes a number of provisions designed to address EPA's and the Department's regulatory innovation efforts. These include allowances for the use of general permits. Consistent with revised federal regulations, the proposed rule also includes allowances for continuous discharges to navigable waters from CAFO animal production areas in exchange for the implementation of innovative technologies and practices that achieve equal or better environmental performance than the "no discharge" standard.
- The rule includes more stringent restrictions on applications to avoid groundwater contamination. These include increased setbacks from direct conduits to groundwater, drinking water supply wells, increased separation distances from groundwater and fractured bedrock, and winter application restrictions on soils with reduced distances to bedrock.

CAFOs are responsible for the storage, management and land application of their manure and process wastewater except in certain cases specified in the rule where manure is transferred. Permittees must maintain records of transferred manure and must obtain Department approval to transfer responsibility. Compared to existing rules, the proposed rules add more allowances for transferring responsibility of CAFO manure to other parties when it is sold or given away.

Plans and specifications for reviewable facilities (e.g., manure storage, runoff control, feed storage, digesters) must be approved by the Department prior to construction. Manure storage facilities shall be constructed in accordance with NRCS Standard 313. The proposed rules incorporate the most recently updated version of NRCS Standard 313. The Department shall also evaluate existing reviewable facilities that have not been approved by the Department to determine if any actions are necessary to upgrade or abandon the facility to protect water quality.

In order to prevent surface applications of solid manure on frozen or snow-covered ground during February and March, all permittees must have two months of storage for solid manure or otherwise stack the solid manure. Existing source CAFOs that currently have permit conditions requiring compliance with revisions to ch. NR 243 upon Department notification, have until January 1, 2008 to construct two months of solid manure storage or otherwise identify areas where they can stack the solid manure during February and March. Existing source CAFOs that do not choose to stack solid manure, must build two months solid manure storage in accordance with a construction schedule contained in a WPDES permit, not to extend beyond November 30th following permit reissuance or modification. New source CAFOs that choose not to stack manure must have two months solid manure storage upon permit issuance. These restrictions regarding the surface application of solid manure in February and March are new requirements.

In order to be able to avoid surface applications of liquid manure on frozen or snow-covered ground in accordance with nutrient management requirements and to satisfy the federal requirement for adequate storage, all permittees must have 180 days of storage for liquid manure. Existing source CAFOs have until January 1st, 2010, to construct 180 days of storage. New source CAFOs shall have 180 days of storage upon permit issuance or prior to the first winter season. Once an operation has 180 days of storage for liquid manure, an operation must continue to maintain 180 days of storage for liquid manure. For an operation that is expanding, the rules allow an operation to temporarily reduce the liquid manure storage capacity if approved by the Department. The requirement for 180-day storage is a new requirement for large CAFOs, although the majority of permitted CAFOs in the state already have 180-days of storage.

Under the proposed rules, permittees must conduct periodic inspections of the animal production area and correct and report any instances of permit noncompliance. Manure, process wastewater and soils where manure and process wastewater is land applied shall be periodically sampled. Daily logs of land application activities and annual reports summarizing land application activities shall be recorded on Department supplied forms. Inspections for runoff are also required for surface applications of manure and process wastewater on frozen or snow-covered ground. Annual reports shall be submitted to the Department summarizing production area inspections, land application activities, and sampling and monitoring activities. While many of the monitoring, inspection and reporting requirements contained in the proposed code were not in the existing code, they have been required in WPDES permits for some time.

In general, most operational requirements for large CAFOs contained in the proposed code would apply upon permit issuance, reissuance or modification, unless the requirements are already referenced or included in an operation's current WPDES permit.

Subchapter III – Other Animal Feeding Operations

The rules in subchapter III address discharges from animal feeding operations with fewer than 1000 animal units. Depending on the type or nature of the discharge and the size of the operation, the rules establish procedures and enforcement options for eliminating or reducing discharges to waters of the state, including the issuance of Notices of Discharge (NOD). There are three categories of discharges for which an NOD may be issued. The proposed rule does not make any substantive changes to existing NOD requirements and procedures.

Also, both the existing and proposed rule require WPDES permit coverage for medium-sized operations (300 to 999 animal units) that have a point source discharge to navigable waters. Operations with fewer than 1000 animal units (includes both medium and small operations) that have significant discharges to navigable waters may be designated by the Department as CAFOs subject to WPDES permit coverage as well. These requirements are based on federal regulations and are already established in the existing rule. The proposed rule adds one more factor for designating a small or medium operation as a CAFO: if the Department determines that a discharge from an operation has contaminated a properly-constructed well, the Department may require that the operation obtain a WPDES permit. The proposed rule establishes application requirements, designation criteria, permit requirements and procedures, and enforcement options for medium and small CAFOs. Permit requirements outlined in ch. NR 243 (e.g., nutrient management requirements) are only mandatory for those small and medium operations that have been issued a WPDES permit.

The rules in subchapter III also address discharges that are associated with noncompliance of livestock performance standards and prohibitions established in ch. NR 151. Implementation procedures and enforcement options are established in the rules. In general, under these regulations, if an existing livestock facility or practice has a discharge to waters of the state that is due to noncompliance with the livestock performance standards or prohibitions in ch. NR 151 (and is not considered a point source discharge), then the Department must make cost share dollars available for eligible costs to get compliance with the standards and prohibitions. Cost sharing does not have to be offered for new operations or facilities, or in cases where corrective measures do not involve eligible costs. These rules are already in effect in the existing ch. NR 243 and the Department is not proposing any significant changes at this time.

Subchapter IV – CAFO Enforcement

The proposed rule explains the Department's enforcement authority for CAFOs.

6. Federal rule summary and comparison: The revisions to federal regulations which served as the basis for the proposed revisions to ch. NR 243 include the following:
Ch. NR 243 follows federal requirements for animal production area standards, inspections, record keeping and reporting, mortality management, restrictions on chemical disposal, weather record keeping associated with land application requirements, and test methods for sampling manure, process wastwater and soil.

The federal regulations covering nutrient management and land application activities are fairly general and require states to develop more detailed technical standards and best management practices that satisfy the general federal standards. Ch. NR 243 is consistent with the following requirements outlined in the federal regulations:

- Federal regulations require that CAFOs develop a nutrient management plan. Under federal regulations, the plan must address the application and timing of manure and process wastewater applications and must minimize the risk of runoff of phosphorus and nitrogen to surface waters.
- The Department's proposed rules require that CAFOs develop a nutrient management plan that meets (1) NRCS Standard 590 for nutrient management, (2) additional requirements that are consistent with federal regulations and (3) other requirements determined by the Department to be necessary to protect surface waters, groundwater and wetlands.
- To minimize runoff of phosphorus and nitrogen and to address timing of applications (required federal standards for land application), the proposed revisions to ch. NR 243 contain restrictions on the winter application of solid and liquid manure and prohibit applications on saturated ground. The proposed rule also requires that permittees take into account predicted precipitation events. Ultimately, all applications are subject to the requirement that manure and process wastewater may not pond on the application site, or run off the application site or discharge to waters of the state via drain tiles under dry weather conditions or due to precipitation events less than the 25-year, 24-hour storm event.
- The federal regulations require that permittees have adequate storage for manure and process wastewater: The proposed revisions to ch. NR 243 define adequate storage to mean storage that is consistent with a permittee's nutrient management and at least 180 days of storage for liquid manure. Consistent with the requirements of a nutrient management plan, design specifications for liquid manure management include a requirement to construct 180 days of storage for liquid manure for all operations by Jan. 1, 2010 (new source CAFOs would need to comply upon permit issuance). Design specifications for solid manure include a requirement to build two months of storage to address high risk periods of runoff during the months of February and March unless an operation chooses to headland stack its solid manure.
- To further address the federal standard requiring minimization of phosphorus and nitrogen runoff, the proposed revisions restrict nitrogen applications and provide two options to address phosphorus transport: (1) phosphorus application restrictions based on soil test phosphorus levels and (2) use of a risk assessment/phosphorus transport method (i.e., the Wisconsin Phosphorus Index).
- States shall specify NPDES permit requirements for medium and small-sized CAFOs: The Department has included requirements for runoff control, manure storage, nutrient management and monitoring and reporting for small and medium CAFOs. For medium and small CAFOs, requirements for nutrient management and manure storage are similar to large CAFO requirements.

Ch. NR 243 can be more stringent than certain federal regulations in areas where (1) there is an absence of federal regulation, (2) additional regulations are needed to achieve water quality standards, or (3) the regulations are associated with discharges to groundwater, which is not covered by the Clean Water Act and federal regulations, but is covered by ch. 283, Stats. Key areas where proposed ch. NR 243 is more stringent than the federal CAFO regulations include the following:

- EPA eliminated the use of the mixed animal unit calculation (i.e., totaling all animal species present at an operation) in defining which operations are large CAFOs requiring permit coverage. The Department has proposed to retain the mixed animal unit calculation (based on existing equivalency factors) for a number of reasons. First, many Wisconsin operations continue to have mixed ages and types of animals. Without the mixed animal unit calculation, some currently permitted CAFOs could potentially no longer require coverage under WPDES permits. Second, the mixed animal unit calculation results in more equitable regulation (e.g., an operation with 900 animal units of heifers and 900 animal units of milking cows would not need a permit but would produce more waste than an operation with 1001 animal units of milking cows that does need a permit). Third, operations in Wisconsin have been subject to the mixed

animal unit calculation, including calculations based on immature animals, since the inception of the CAFO WPDES permit program in 1984 with little or no confusion. To be as protective as the federal regulations, the proposed rules have also added the federal method for determining the size. As discussed previously, the method that results in the largest number of animal units is used to determine the size. For some animal types, the federal rule reduces the number of animals needed to meet the 1000 animal permit threshold.

- The federal requirements state that all CAFOs with 1000 animal units or more must apply for WPDES permit coverage. In *Waterkeeper Keeper Alliance et al. v. EPA*, 399 F. 3d 486 (2nd Cir. 2005), the court vacated the duty to apply requirement. The Department's proposed rules state that all large CAFOs (1000 animal units or more) that store manure or process wastewater in a structure that is at or below grade, or that land apply manure or process wastewater must apply for WPDES permits. It is the Department's position that due to the extent of water resources present in the state of Wisconsin (surface waters, groundwater and wetlands), all large CAFOs that store or land apply manure or process wastewater in the state have discharges of manure or process wastewater pollutants that reach groundwater and/or surface waters via leaching or surface runoff. Therefore, any large CAFO must apply for a WPDES permit if it engages in storage or land application activities. Under chapter 283, Stats., WPDES permits must address discharges to all waters of the state, not just navigable waters. This approach is consistent with how the Department currently regulates large CAFOs. With regard to medium and small animal feeding operations, the basis for requiring permit coverage will still depend on whether there has been a significant discharge to navigable waters, except a permit may be required in cases where a discharge from a medium or small farm has caused a well contamination. Federal regulations do not require permits based on well contaminations because the federal NPDES permit program does not cover discharges that impact groundwater only.
- The federal rules provide a definition of agricultural storm water discharges. Agricultural storm water discharges are not subject to permit terms and conditions. The proposed definition of agricultural storm water could be viewed as more stringent than the federal definition. However, the definition or scope of agricultural storm water discharges will vary from the federal definition from state to state and will depend on a state's specific nutrient management standard and permit requirements.
- The Department requires operations to submit an initial permit application 12 months prior to becoming a CAFO, and a complete permit application 6 months prior to becoming a CAFO. While the federal rule does not require an initial permit application, the initial application requirement is not burdensome (very limited information is required) and it is very helpful for operations and the Department in determining how WPDES rule requirement impact an operation's expansion plans.
- EPA regulations do not require submittal and approval of nutrient management plans to ensure compliance with nutrient management plan requirements, and consequently federal regulations only have minimal nutrient management recordkeeping and reporting requirements. Under the *Waterkeeper* decision, however, the court found that EPA's failure to require submittal of the plan was improper (because it is a WPDES permit requirement), so EPA will need to make changes to its regulations. Consistent with current requirements under ch. NR 243, the Department's proposed rules continue to require submittal and approval of CAFO nutrient management plans, and also require that the permittee conduct recordkeeping and reporting, so compliance with the plan can be evaluated.
- The federal nutrient management plan requirements impose a 100-foot setback from navigable waters and their conduits and allow for equivalent practices to the 100-foot setback, but the federal regulations do not specify acceptable equivalent practices. The Department has provided potentially equivalent practices to the 100-foot setback that include practices implemented within 300 feet of streams and 1000 feet of lakes (the Surface Water Quality

Management Area or SWQMA used in proposed ch. NR 243 and NRCS Standard 590). These practices are intended to address the 100-foot setback as well as potential impacts from acute and chronic delivery of pollutants associated with manure and process wastewater applications near surface waters.

- EPA specifies setbacks from agricultural wellheads as part of its restrictions on direct conduits to navigable waters. In order to provide protection for groundwater and avoid impacts to potable water supplies, the Department has specified additional setbacks and practices within certain distances of wells (private, noncommunity and community wells), areas of shallow soils and direct conduits to groundwater. These setbacks are especially important given the private well contamination events experienced in the past, including those that have occurred recently.
- EPA limits the extent of CAFO responsibility for the land application of its manure and process wastewater that is transferred or given away to another party (i.e., where the CAFO does not have control over the application of the wastes). The Department's proposed rules state that the CAFO maintains responsibility for the transferred manure with a few limited exceptions.
- The federal regulations do not address potential water quality impacts from CAFO outdoor vegetated areas (large, open grassed areas connected to CAFOs, but not subject to the production area "no discharge" standard). The Department's proposed rules require that CAFOs maintain vegetation in these outdoor vegetated areas to mitigate impacts to surface waters and wetlands. Under the proposed rule, these outdoor vegetated areas are considered part of the ancillary areas.
- The federal regulations do not require emergency response plans for CAFOs. The Department has proposed requiring emergency response plans to address spills and unauthorized discharges to avoid acute and catastrophic impacts to waters of the state.
- The federal regulations do not require submittal of plans and specifications for manure and process wastewater storage structures and runoff controls systems. Pursuant to s. 281.41, Stats., the Department has the authority to require submittal of plans and specifications for certain structures and facilities covered by WPDES permits. Both the existing and proposed rule establish design standards and require submittal and Department review of certain structures and facilities.

7. Comparison with rules in adjacent states: For this section of the analysis (comparison to other states), the Department has not discussed NPDES permit program requirements which are fairly standard and do not vary significantly from state to state or non-controversial (e.g., inspection and "no discharge" requirements for CAFO animal production areas, manure/soil sampling, animal mortality management, etc.). The following section is a state-by-state comparison of the more controversial issues associated with the federal CAFO rule revisions. It should be noted that all the states in this comparison address impacts to surface water, groundwater and wetlands.

Minnesota: Minnesota has chosen not to revise its NPDES regulations but has instead issued a NPDES general permit that incorporates the federal revisions. As in Wisconsin, all large CAFOs are required to apply for NPDES permits with the size of the operation determined in accordance with a state combined animal unit calculation and the federal individual animal unit calculation method. Minnesota also reviews and approves CAFO nutrient management plans. Minnesota has NPDES requirements for phosphorus-based nutrient management based on soil test phosphorus levels. Fields with soil test phosphorus levels greater than 75 ppm within 300 feet of waters are rated very high in terms of potential nutrient delivery to surface waters. Applications on saturated ground and where precipitation is forecast within 24 hours (50% chance of 0.25" during winter, 50% chance of 0.5"at all other times) is prohibited. While Minnesota does not prohibit solid or liquid manure applications on frozen or snow-covered ground, it does place certain restrictions on where the manure can be applied (e.g., liquid manure cannot be applied on slope greater than 2%) and requires a field-by-field evaluation to ensure runoff will not occur. Minnesota also requires that all

liquid manure storage facilities built after 2000 are constructed with 9 months of storage. Minnesota specifies equivalent practices to the 100-foot setback from navigable waters and their conduits for applications of manure and process wastewater. Minnesota's equivalent practices served as the basis for practices identified in revisions to ch. NR 243. Unlike Wisconsin, Minnesota allows CAFOs to transfer responsibility of manure where they do not control the timing and rate of application. However, Minnesota has extensive record keeping associated with the transfer of manure and manure. Furthermore, manure must still be applied in accordance with state nutrient management requirements.

Michigan: Michigan has revised its NPDES CAFO rules as well as issued a general permit with provisions addressing the revised federal regulations. Unlike Wisconsin, Michigan does not use the mixed animal unit calculation for determining CAFOs size. All Large CAFOs that discharge or have potential to discharge must apply for NPDES permits. While Michigan requires creation of a nutrient management plan, unlike Wisconsin, Michigan does not require review or approval of the plan. Michigan has NPDES requirements for phosphorus-based nutrient management based on soil test phosphorus levels. Fields with soil test phosphorus levels of 75 ppm or more are rated high in terms of potential nutrient delivery to surface waters. Applications on saturated ground and where precipitation is forecast within 24 hours (70% chance of 0.5") is prohibited. Surface applications of manure and process wastewater applications are prohibited on frozen or snow-covered land that is upslope from surface waters. Michigan requires 6 months storage for all manure unless another length of storage is determined by NRCS. Unlike Wisconsin, Michigan has not chosen to identify practices equivalent to the 100-foot setback from navigable waters and their conduits but could approve alternate practices under individual NPDES permits. Similar to Minnesota, Michigan allows CAFOs to transfer responsibility for manure in those instances where CAFO operators do not control manure applications.

Iowa: Iowa has recently adopted new NPDES CAFO rules for operations with open feedlots. Iowa has withdrawn its NPDES CAFO rules for CAFOs with animals in total confinement. Iowa contends that operations with animals in total confinement do not need to apply for NPDES permits since they do not allow discharges from the animal production area, nor do they allow discharges of manure or process wastewater from land application sites at any time. Similar to Minnesota and Wisconsin, regulated large CAFOs (with open feedlots) must apply for permits. Iowa uses the mixed animal unit calculation to determine large CAFO size. Operations that demonstrate they have no potential to discharge do not need to obtain permit coverage. Similar to Michigan, Iowa requires creation of nutrient management plans and periodically reviews and approves the plans. Iowa has NPDES requirements for phosphorus-based nutrient management based on phosphorus transport modeling (phosphorus index). Iowa does not address applications of manure and process wastewater on frozen or snow-covered ground but does prohibit applications on saturated ground and when precipitation has recently occurred or is occurring. Manure storage is not required. Iowa has specified setback ranging from 200-800 feet that can be reduced to a 50 foot setback with a 50-foot vegetated buffer. Similar to Wisconsin, Iowa CAFOs are responsible for all their manure, except for dry poultry manure that is sold as a product.

Illinois: Illinois has issued a limited number of NPDES permits to CAFOs and is currently regulating most animal feeding operations under state regulations. Illinois is in the process of revising its NPDES CAFO rules. It has issued a general permit with provisions addressing the revised federal regulations but has yet to cover a CAFO under the general permit. Illinois regulates operations that meet the federal definition of large CAFOs. The NPDES general permit requires submittal and approval of nutrient management plans. Illinois does not allow applications on soil saturated by recent precipitation or when precipitation will produce runoff. Applications are not allowed on

frozen or snow-covered soil if the application will produce runoff. Illinois state rules require that liquid storage built or modified after 1977 provides 120 days of storage. Liquid storage built after 1996 must provide 270 days of storage. Solid manure storage built after 1998 must provide 150 days of storage. Illinois has NPDES requirements for phosphorus-based nutrient management based on soil test phosphorus levels. Fields with soil test phosphorus levels of greater than 150 ppm are rated very high in terms of potential nutrient delivery to surface waters. No options are provided for the 100-foot setback from navigable waters and their conduits. Illinois has yet to determine requirements for transfer of manure responsibility.

8. Summary of factual data and analytical methodologies: Rule revisions to ch. NR 243 are in response to changes to federal regulations for CAFOs, and to protect water quality in the state. EPA compiled a number of technical and policy documents summarizing and outlining the basis for the revised regulations, including potential economic impacts. These documents are available online at http://cfpub.epa.gov/npdes/home.cfm?program_id=7.

The Department used additional materials and methodologies to create the proposed revisions to ch. NR 243. These include:

- NPDES Permit Writers' Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations: Provides information to NPDES permitting authorities, owners and operators of animal feeding operations, and the general public on how to implement the Clean Water Act CAFO regulations, including: 1) information to help permitting authorities ensure that NPDES permits conform to the CAFO regulations and 2) general information on Clean Water Act and NPDES requirements that EPA will consider when reviewing the adequacy of State NPDES permits for CAFOs.
- Natural Resource Conservation Service (NRCS) technical standards, developed with input from a broad range of qualified technical experts.
- Meetings with the NR 243 Technical Advisory Committee (TAC), consisting of various stakeholder groups, which met 14 times between September of 2003 through February of 2005.
- Meetings of internal staff in the Agricultural Runoff Program which met approximately twice a month between the months of September 2003 and May of 2005.
- Department documented impacts to waters of the state associated with permitted and unpermitted animal feeding operations.
- Comments received on the public noticed revisions to ch. NR 243.

9. Analysis and supporting documents used to determine effect on small business or in preparation of economic impact report: In determining the effects that revisions to ch. NR 243 would have on small business, outlined in the Small Business/Final Regulatory Flexibility Analysis, the Department considered (1) the flexibility provided by federal rules in applying the rules and (2) the environmental consequences of providing alternate or less stringent requirements for small business.

The primary documents and methods used in determining the amount of flexibility provided under federal rules include:

- The Wednesday, February 12, 2003, Federal Register, containing the relevant parts of 40 CFR (Parts 9, 122, 123 and 412) that were modified and the attached preamble to these rules that reflect the reasoning behind EPA's modifications.
- NPDES Permit Writers' Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations: Provides information to NPDES permitting authorities, owners and operators of animal feeding operations, and the general public on how to implement the Clean Water Act CAFO regulations, including: 1) information to help permitting authorities ensure that NPDES

permits conform to the CAFO regulations and 2) general information on Clean Water Act and NPDES requirements that EPA will consider when reviewing the adequacy of State NPDES permits for CAFOs.

- Discussions with EPA-Region V.

As stated in the Small Business/Final Regulatory Flexibility Analysis, since most large CAFOs are also considered to be small businesses there is limited flexibility to monitoring, reporting, schedule and compliance requirements contained in the rule.

The Department addressed potential opportunities for minimizing impacts on small business primarily through the practical and technical input provided by the NR 243 Technical Advisory Committee (TAC) and through public comment received on the proposed rule revisions. The NR 243 TAC provided input on what could be considered practical and economically sound means of compliance with proposed rules while minimizing potential water quality impacts. In addition, public comment identified particular areas of concern for small businesses. In some instances, the Department believed that establishing less stringent requirements for small businesses would have rendered portions of the WPDES permit program ineffective (e.g., reducing the amount of information that would be required to be provided to the Department to demonstrate compliance with land application requirements). Where possible, the Department has tried to standardize requirements as well as providing standardized reporting forms to improve consistency and simplify compliance.

10. Anticipated private sector costs: Fiscal impacts on the private sector primarily relate to phosphorus-based nutrient management requirements and to storage design requirements for solid and liquid manure. The Department estimates that the total first year costs of the rule could range from $90,000 to $33.3 million statewide, or no additional cost to approximately $500,000 per operation. Since the great majority of costs are associated with manure storage requirements, fiscal impacts are highly dependent on the number of months of liquid manure storage individual operations currently have. For example, the Department has documented that approximately 80% of currently permitted operations already have six months of storage, which would significantly reduce potential first year costs.

Using a variety of assumptions, the Department estimates a first-year statewide increase in costs associated with phosphorus-based nutrient management requirements of about $90,000. In estimating the cost impact, the Department assumed that 8 operations would be restricted by the phosphorus-based nutrient management planning requirements for the first time as a result of the revised rules. Based on an estimated cost of $5.63 per animal unit per year for phosphorus-based management and an average of 2,000 animal units per CAFO, the total first year cost associated with the new rule is $90,000 for proposed phosphorus-based nutrient management requirements.

The Department estimates total first year costs associated with manure storage requirements at $4.2 million to $33.2 million. This cost estimate assumes that 50-80% of all current and new CAFOs have or will have 6 months of liquid manure storage regardless of the proposed revisions to ch. NR 243 and would not be impacted by the storage provisions in the proposed rule changes. The remaining 20-50% would need to build some amount of storage to comply with the proposed rule changes. If one assumes that a 2,000 animal unit operation produces 736,100 cubic feet of manure and process wastewater in a 6 month period, the range of manure storage construction costs would be $257,700 to $404,900 for six months of storage. If 20-50% of the current and new CAFOs would have otherwise built at least a 3 month storage, irrespective of the new NR 243 requirements, the total first year cost is estimated at $4.2 million to $16.6 million. If 20-50% of the current and new CAFOs

would not have otherwise built any storage and are required to construct 6 month storage, the total first year cost is estimated at $8.5 million to $33.2 million.

11. Effect on small business: The proposed revisions to ch. NR 243 will result in additional construction and management costs for certain small businesses since many of the operations that fall under the CAFO regulations are small businesses. Costs to small businesses are identified in section 10 (Anticipated private sector costs) and additional impacts to small businesses are included in the Small Business/Final Regulatory Flexibility Analysis.

12. Enforcement:
Large Concentrated Animal Feeding Operations (CAFOs). Enforcement of the rules that apply to large CAFOs occur through stepped enforcement actions such as issuance of notices of violation (NOV) and enforcement conferences. Furthermore, pursuant to s. 283.89(1), Stats., violations of the rules, WPDES permit terms and conditions or ch. 283, Stats., may be referred to the Wisconsin Department of Justice. Under ss. 283.87, 283.89 and 283.91, Stats., if the Department finds that an owner or operator of a large CAFO is violating: (1) a term or condition of its WPDES permit, or (2) any requirement in these rules or chapter 283, Stats., the Department, through a referral to DOJ, may seek temporary or permanent injunctive relief and may seek civil and criminal penalties. In such enforcement actions, the state may also recover the costs of investigating the violations, expenses of prosecution and the costs of removing and remedying the adverse effects to waters of the state that were caused by the violations. The Department considers several factors when choosing appropriate enforcement actions. Some of these factors include degree of harm to the environment, frequency or number of violations, whether violations were due to negligent or intentional actions, whether violations were reported upon discovery, and whether actions were taken to minimize impacts to the environment.

Medium and Small Concentrated Animal Feeding Operations (CAFOs). If a medium or small CAFO holds a WPDES permit, the enforcement options discussed above for large CAFOs also apply to WPDES permitted medium and small CAFOs if an owner or operator of the permitted CAFO has a violation of the rules, chapter 283 or the terms and conditions of the WPDES permit.

Medium and Small Animal Feeding Operations (AFOs). If a medium or small farm has a discharge of pollutants, the Department may take several actions under these rules depending on the type or category of discharge. These actions include enforcement conferences, referring the matter to the county, issuing a notice of discharge (NOD), requiring WPDES permit coverage or referring the matter to the Department of Justice for penalties or other relief under s. NR 281.98 or 283.87, 283.89 and 283.91, Stats. Under s. 281.16(3), Stats., if the discharge is caused by noncompliance with the state performance standards and prohibitions established in ch. NR 151, and the discharge is not considered a point source discharge, then the Department must make cost share dollars available to the operator to achieve compliance if the discharge is from an existing facility or practice. Cost sharing is not required for compliance for new farms or practices. Counties are also responsible for implementing the performance standards and prohibitions so the Department may refer these cases to the county to work with a farm to achieve compliance.

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SECTION 1. Chapter NR 243 is repealed and recreated to read:

Chapter NR 243
ANIMAL FEEDING OPERATIONS

Subchapter I – General

NR 243.01 Purpose. (1) The purpose of this chapter is to implement design standards and accepted management practices and to establish permit requirements and the basis for issuing permits to CAFOs. This chapter also establishes the criteria under which the department may issue a notice of discharge or a permit to other animal feeding operations that discharge pollutants to waters of the state or fail to comply with applicable performance standards and prohibitions in ch. NR 151. For other animal feeding operations, it is the intent of the department that a permit would be issued only when it can be demonstrated that an operation has a discharge of pollutants to waters of the state. The authority for promulgation of this chapter is in chs. 281 and 283, Stats.

(2) The department recognizes the unique nature of the state's agricultural industry and the industry's declared interest in protecting and preserving the state's natural resources. The department also recognizes the benefit of manure applied to land for its fertilizer and soil conditioning value, and encourages the management and use of these materials in such a manner. Only those animal feeding operations that improperly manage their wastes and as a result cause groundwater or surface water pollution or that fail to comply with applicable performance standards and prohibitions or those operations that are CAFOs will be regulated under this chapter. It is not the intent of the department to require that all animal feeding operations obtain a permit.

NR 243.02 Applicability. The provisions of this chapter are applicable to large CAFOs and other animal feeding operations that discharge pollutants to waters of the state as determined under subch. III.

NR 243.03 Definitions. The following definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are in ch. NR 205.

(1) "Accepted management practices" means practices, techniques or measures through which runoff, manure, milking center waste, leachate and other waste streams associated with an animal feeding operation are handled, stored, utilized or otherwise controlled in a manner that is intended to achieve compliance with livestock performance standards and prohibitions established in ch. NR 151 and water quality objectives established under chs. 281 and 283, Stats. These practices, techniques or measures are established in this chapter as well as ch. NR 154 and ch. ATCP 50 and may include additional practices and procedures as approved by the department on a case-by-case basis.

(2) "Agricultural storm water discharge" means:

(a) For unpermitted animal feeding operations with 300 to 999 animal units, a precipitation-related discharge of manure or process wastewater pollutants to surface waters from a land application area that may occur after the owner or operator of the animal feeding operation has land applied manure or process wastewater in compliance with a nutrient management plan that meets the nutrient management requirements of this chapter; and

(b) For permitted CAFOs, a precipitation related discharge of manure or process wastewater pollutants to surface waters from a land application area that may occur after the owner or operator of the CAFO has land applied the manure or process wastewater in compliance with the nutrient management requirements of this chapter and the terms and conditions of its WPDES permit.

Note: The definition of agricultural storm water discharge does not include discharges of manure or process wastewater pollutants to surface waters from land application activities by an unpermitted small animal feeding operation, because these land application discharges to surface waters by a small operation are not a basis for requiring WPDES permit coverage. See s. NR 243.26(2)(c).

(3) "Ancillary service and storage areas" means areas that are adjacent to the production area, but are not used for handling or managing livestock, livestock products, mortalities, manure, process wastewater or raw materials. These ancillary areas include areas such as access roads, shipping and receiving areas, pesticide and herbicide storage, oil or fuel storage, raw material handling equipment maintenance, crop equipment or vehicle storage and maintenance areas and refuse piles.

(4) "Animal feeding operation" means a lot or facility, other than a pasture or grazing area, where animals have been, are or will be stabled or confined, and will be fed or maintained for a total of 45 days or more in any 12-month period. Two or more animal feeding operations under common ownership or common management are a single operation if at least one of the following is true:

(a) The operations are adjacent.

(b) The operations utilize common systems for the landspreading of manure or other wastes, including a nutrient management plan or landspreading acreage.

Note: While it is not the sole factor used to determine whether operations have a common system for landspreading, use of common land application equipment is one of the factors the department considers when determining if operations have a common system for landspreading.

(c) Manure, barnyard runoff or other wastes are commingled in a common storage facility prior to landspreading.

(5) "Animal unit" means a unit of measure used to determine the total number of single animal types or combination of animal types, as specified in s. NR 243.11, that are at an animal feeding operation.

(6) "Applicant" means an owner or operator of a proposed or existing CAFO that is applying for a WPDES permit.

(7) "Areas of channelized flow" means channels or depressions that concentrate flow and are either:

(a) Man-made by a means other than typical field cultivation practices.

(b) A natural channel or depression that cannot be removed or rerouted using typical field cultivation practices or that form on a recurring basis in the same area.

(8) "ASTM" means the American society for testing and materials.

(9) "Combined animal units" means any combination of animal types calculated by adding the number of single animal types as multiplied by the equivalency factors as specified in s. NR 243.11.

(10) "Compost" has the meaning specified under s. NR 500.03(44).

(11) "Composting" has the meaning specified under s. NR 500.03(45).

(12) "Concentrated animal feeding operation" or "CAFO" means an animal feeding operation to which any of the following apply:

(a) The operation has 1,000 animal units or more at any time and stores manure or process wastewater in a below or at grade level storage structure or land applies manure or process wastewater.

(b) The operation has 300 to 999 animal units and has a category I unacceptable practice under s. NR 243.24(1)(a).

(c) Under s. NR 243.26(2), the operation is designated by the department as having a significant discharge of pollutants to navigable waters or has caused the fecal contamination of water in a well.

(13) "CAFO outdoor vegetated area" means an area that is part of the ancillary service and storage area that consists of a large open outdoor vegetated area of land used by CAFO animals that is owned or operated by a CAFO and is adjacent or connected to, but not part of, the production area.

(14) "Conduit to a navigable water" means a natural or man-made area or structure that discharges to a navigable water via channelized flow. This includes open tile line intake structures, open vent pipes, sinkholes, agricultural well heads, drainage ditches that discharge to navigable waters and grassed waterways that drain directly to a navigable water.

Note: Conduits to navigable waters do not include the components of a subsurface drainage system that are not present at the soil surface.

(15) "Contaminated runoff" means that portion of manure, process wastewater, leachate or other wastes or raw materials mixed with precipitation from animal feeding operations that transports pollutants such as organic matter, suspended solids or nutrients.

(16) “Corrective measures” means accepted management practices or technical standards specified in ch. NR 154 or ATCP 50 designed to address an unacceptable practice or other practices determined by the department to be necessary to protect water quality.

(17) “DATCP” means the Wisconsin department of agriculture, trade and consumer protection.

(18) “Department” means the Wisconsin department of natural resources.

(19) “Designed structures” means groundwater monitoring systems, runoff control structures, permanent spray irrigation or other land application systems, manure, raw materials and waste storage facilities or other manure or waste transfer or treatment systems.

(20) “Direct conduits to groundwater” mean wells, sinkholes, swallets, fractured bedrock at the surface, mine shafts, non-metallic mines, tile inlets discharging to groundwater quarries, or depressional groundwater recharge areas over shallow fractured bedrock.

(21) “Diversion” means a structure built to divert sheet flow or part or all of the water from an existing waterway into a different channel or area.

(22) “Exceptional resource water” means any surface water, or portion thereof, in s. NR 102.11.

(23) “Existing source CAFO” means an operation that is covered by a WPDES permit as of the effective date of this chapter…[revisor insert date] and any other permitted operation that is not a new source CAFO.

Note: Existing source CAFOs include CAFOs that are permitted as of the effective date of this rule…[revisor insert date] and animal feeding operations in existence on a site prior to April 14, 2003 that add animals and later apply for a WPDES permit.

(24) “Frozen ground” means soil that is frozen anywhere between the first ½” and 8” of soil as measured from the ground surface.

Note: Under the definition of frozen ground, soil that is that frozen to a depth of ½” or less as measured from the ground surface is not considered frozen ground.

(25) “Governmental unit” means a municipality as defined in s. 281.01(6), Stats.

(26) “Grassed waterway” means a natural or constructed waterway or outlet shaped or graded and established in suitable vegetation as needed for the conveyance of runoff from a field, diversion or other structure.

(27) “Hydrologic soil group” means a group of soils having similar runoff potential under similar storm and cover conditions.

(28) “Incorporation” means mixing the manure or process wastewater with surface soil so that at least 80% of applied manure or process wastewater is covered with soil and the application rate is controlled to ensure that applied material stays in place and does not run off. Incorporation includes standard agricultural practices such as tillage or other practices that are the equivalent to providing 80% soil coverage.

(29) “Injection” means the placement of liquid manure or process wastewater 4 to 12 inches below the soil surface in the crop root zone using equipment specifically designed for that purpose and where the applied material is retained by the soil and does not concentrate or pool below the soil surface.

(30) “Land application” means surface application, injection or incorporation of manure, process wastewater or other waste generated by a CAFO on cropland using manure hauling vehicles or equipment.

(31) “Large CAFO” means an animal feeding operation that has 1,000 animal units or more at any time.

(32) “Liquid manure” means manure with a solids content of less than 12%.

(33) “Livestock facility” means a structure or system constructed or established on a livestock operation or animal feeding operation, including a runoff control system associated with an outside feedlot, manure storage facility or feed bunker.

(34) “Livestock performance standards and prohibitions” means performance standards and prohibitions contained in ss. NR 151.05, 151.06, 151.07 and 151.08.

(35) “Long-term no-till” means no-till farming that has been implemented a minimum of 3 consecutive years.

(36) “Manure” means a material that consists primarily of litter or excreta, treated or untreated, from livestock, poultry or other animals. Manure includes material mixed with runoff, bedding contaminated with litter or excreta, or process wastewater.

(37) “Margin of safety level” means the level in a liquid storage or containment facility that is vertically one foot below the lowest point of the top of the facility or structure.

(38) “Maximum operating level” means the level in a liquid storage or containment facility, measured vertically from the lowest point of top of the facility, that is the sum of the margin of safety level and the level necessary to contain the precipitation and runoff that will enter the facility as a result of 100-year, 24-hour rainfall event for swine, veal and poultry operations that are new source CAFOs or a 25-year, 24-hour storm event for all other operations.

(39) “Medium CAFO” means an animal feeding operation with 300 to 999 animal units that has a category I discharge to navigable waters under s. NR 243.24, or that is designated by the department as a CAFO under s. NR 243.26(2).

(40) “Milking center waste” means all wastes generated at a milking center or milkhouse including waste milk, detergents, acids, sanitizers, manure, bedding materials and footbath chemicals.

(41) “New source CAFO” means any of the following:

(a) An operation that is a large CAFO that has been or will be constructed on or after April 14, 2003, on a new site where no other animal feeding operation is located.

(b) An operation that is a large CAFO that was in existence prior to April 14, 2003, but that completely replaces all of its production or processing equipment on or after April 14, 2003.

(c) A new addition to an existing operation that is a large CAFO that is essentially a new production area added on or after April 14, 2003 that is completely independent of the production area in existence on the site before April 14, 2003.

(d) An animal feeding operation that has been constructed on or after April 14, 2003, on a new site where no other animal feeding operation is located and later becomes a large CAFO.

Note: New operations are operations that essentially build on a brand new site or significantly modify most or all facilities at an existing site, on or after April 14, 2003.

(42) “NOD” means notice of discharge.

(43) “NRCS” means the Wisconsin natural resources conservation service.

(44) “NRCS Standard 590” means the technical standard for nutrient management contained in Appendix B to ch. ATCP 51, except for section V.D.

Note: Appendix B to ch. ATCP 51 includes the September 2005 version of NRCS Standard 590.

(45) “100-year, 24-hour rainfall event” means a rainfall event measured in terms of the depth of rainfall occurring within a 24-hour period and having an expected recurrence interval of once in 100 years as identified in Table 1.

(46) “Outstanding resource water” means any surface water, or portion thereof, specified in s. NR 102.10.

(47) “Pasture or grazing area” means an area where animals graze in large open areas, that is not adjacent to, or connected to, a CAFO production area, and where stocking densities, management systems and management of feed sources ensure that sufficient vegetative cover is

maintained over the entire area at all times. A pasture or grazing area is not an animal feeding operation.

Note: Operations that have milking centers for animals on pasture or grazing areas are animal feeding operations since the milking center is considered to be an area of confinement.

Note: A CAFO may have multiple production areas located at different sites or farms, such as a main farm and satellite feedlots or farms.

(48) "Permanent runoff control systems" means constructions or devices installed to permanently contain, control, divert or retard surface runoff water.

(49) "Permit" means a WPDES permit for the discharge of pollutants issued by the department under ch. 283, Stats.

(50) "Permittee" means an owner or operator of a WPDES permitted CAFO.

(51) "Phosphorus index" means the method for assessing and minimizing phosphorus delivery to surface waters associated with manure or process wastewater applications referenced in section V.C.2. of NRCS Standard 590.

(52) "Phosphorus index value" means the value calculated using the phosphorus index that identifies the relative level of risk for phosphorus delivery from a field where manure or process wastewater, along with other nutrients sources, have been or will be applied.

(53) "Process wastewater" means wastewater from the production area directly or indirectly used in the operation of animal feeding operation that results from any or all of the following:

(a) Spillage or overflow from animal or poultry watering systems.

(b) Washing, cleaning, or flushing pens, barns, manure pits, or other animal feeding operation facilities.

(c) Direct contact swimming, washing, or spray cooling of animals or dust control.

(d) Water that comes into contact with any raw materials or animal byproducts including manure, feed, milk, eggs or bedding.

(54) "Production area" means that part of an animal feeding operation that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas but not CAFO outdoor vegetated areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers and

bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions that separate uncontaminated storm water. Included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment or disposal of mortalities.

(55) "Raw materials" means materials typically stored at an agricultural operation that are directly used in livestock production such as bedding material, silage, haylage, grain and other feed sources, but this term does not include pesticides, motor oil or fuel.

(56) "Reviewable facility or system" means runoff control structures, feed and other raw materials storage, permanent spray irrigation or other land application systems, groundwater monitoring systems, manure storage facilities, manure treatment or transfer systems, or other structures or systems associated with the storage, containment, treatment or handling of manure or process wastewater.

(57) "Saturated soils" means soils where all pore spaces are occupied by water and where any additional inputs of water or liquid wastes cannot infiltrate into the soil.

(58) "Solid manure" means manure with a solids content of 12% or more.

(59) "Small CAFO" means an animal feeding operation with less than 300 animal units that is designated by the department as a CAFO under s. NR 243.26(2).

(60) "Snow covered ground" means areas of a field covered with any amount of snow.

(61) "Source water protection area" means an area delineated by the department for a public water system or including numerous public water systems, whether the source is ground water or surface water or both, as part of the state source water assessment program approved by the U.S. environmental protection agency under 42 USC 300j-13.

(62) "Spray irrigation" means the application of liquid manure or process wastewater to cropland using equipment that discharges manure into the air via a single nozzle or multiple nozzles or hoses and disperses the manure over distances greater than could be achieved using typical moving vehicle or manure hauling equipment.

(63) "Storage facility" means an excavated or diked pond, walled structure or platform designed for containment of manure.

(64) "Sufficient vegetative cover" means that crop residue or vegetation is present over an entire area in an amount and density of stand that slows the movement of and limits contaminated runoff and soil erosion.

(65) "Surface applied manure" means manure applied to the ground surface by moving vehicles that is not incorporated or injected.

(66) “Surface water quality management areas” or “SWQMA” means all of the following:

(a) The area within 1,000 feet from the ordinary high water mark of navigable waters that consist of a lake, pond or flowage.

(b) The area within 1,000 feet from the high water mark of navigable waters that consist of a glacial pothole lake.

(c) The area within 300 feet from the ordinary high water mark of navigable waters that consist of a river or stream or other non-lake navigable waters.

(d) The area within 300 feet of conduits to navigable waters.

(67) “Swallet” means a sinkhole or rock hole that intercepts a stream, diverting all or a portion of it to groundwater.

(68) “303(d) listed waters” means the list of impaired waters in the state developed by the department pursuant to 33 USC 1313 and 40 CFR s. 130.7.

(69) “Tolerable soil loss” or “T” means the maximum rate of soil erosion, in tons per acre per year, allowable for particular soils and site conditions that will maintain soil productivity.

Note: Soil loss will be calculated according to the revised universal soil loss equation II as referenced in ch. ATCP 50 or, potentially, SNAP-Plus software currently being develop by UW-Extension.

(70) “25-year, 24-hour rainfall event” means a rainfall event measured in terms of the depth of rainfall occurring within a 24-hour period and having an expected recurrence interval of once in 25 years as identified in Table 1.

(71) “Unacceptable practice” means a practice that causes or has caused the discharge of pollutants to waters of the state or that results in an operation’s failure to comply with livestock performance standards and prohibitions outlined in ch. NR 151.

(72) “Wastewater treatment strip” means a constructed strip or area of vegetation for reducing sediment, organic matter and other pollutants.

(73) “Waters of the state” has the meaning specified under s. 283.01(20), Stats.

(74) “Water quality management area” or “WQMA” has the meaning in s. NR 151.015(24).

(75) “Wetland” means areas delineated on a hydric soils map that are dominated by hydrophytic vegetation. Wetlands do not include prior converted or farmed wetlands.

(76) “Wetland functional values” means the values or uses of wetlands established in s. NR 103.03(1).

(77) “Wet soil” means soil that is not saturated but has a moisture content that limits its ability to absorb significant amounts of additional liquid.

(78) “Winter acute loss index value” means the value calculated using the phosphorus index that identifies the relative level of risk for acute losses of manure and process wastewater pollutants associated with surface applications during frozen or snow-covered conditions.

(79) “WPDES” means the Wisconsin pollutant discharge elimination system established under ch. 283, Stats.

NR 243.04 Rainfall events. The design rainfall amount and probable intensity of 25-year, 24-hour and 100-year, 24-hour rainfall events for locations in Wisconsin shall be determined from the data in Table 1, or for a particular location, the determination may be made on the basis of more recent rainfall probability data verified by a government agency and approved by the department for this purpose.

TABLE 1
Probable 25-year and 100-year 24-hour Rainfall Events, In Inches of Rain, for Counties in Wisconsin

	25-year	100-year		25-year	100-year
Adams	4.7	5.9	Marathon	4.5	5.7
Ashland	4.3	5.4	Marinette	4.1	4.9
Barron	4.6	5.8	Marquette	4.6	5.8
Bayfield	4.4	5.4	Menominee	4.3	5.2
Brown	4.3	5.1	Milwaukee	4.5	5.5
Buffalo	4.8	6.1	Monroe	4.8	6.1
Burnett	4.6	5.7	Oconto	4.2	5.1
Calumet	4.4	5.3	Oneida	4.3	5.3
Chippewa	4.7	5.8	Outagamie	4.4	5.3
Clark	4.7	5.9	Ozaukee	4.4	5.4
Columbia	4.7	5.9	Pepin	4.8	6.0
Crawford	5.0	6.2	Pierce	4.8	6.0
Dane	4.8	6.0	Polk	4.7	5.8
Dodge	4.6	5.7	Portage	4.5	5.7
Door	4.1	4.9	Price	4.4	5.5
Douglas	4.4	5.5	Racine	4.6	5.6
Dunn	4.7	6.0	Richland	4.9	6.2
Eau Claire	4.7	6.0	Rock	4.7	6.0
Florence	4.1	4.9	Rusk	4.6	5.7
Fond du Lac	4.5	5.6	St. Croix	4.7	5.9
Forest	4.2	5.1	Sauk	4.8	6.1
Grant	5.0	6.2	Sawyer	4.5	5.6
Green	4.8	6.1	Shawano	4.4	5.4
Green Lake	4.6	5.7	Sheboygan	4.4	5.4
Iowa	4.9	6.2	Taylor	4.6	5.7
Iron	4.3	5.3	Trempealeau	4.8	6.1
Jackson	4.8	6.0	Vernon	4.9	6.2
Jefferson	4.6	5.8	Vilas	4.3	5.2
Juneau	4.7	6.0	Walworth	4.6	5.8
Kenosha	4.6	5.7	Washburn	4.5	5.6
Kewaunee	4.2	5.0	Washington	4.5	5.5
LaCrosse	4.9	6.1	Waukesha	4.6	5.6
Lafayette	4.9	6.2	Waupaca	4.5	5.5
Langlade	4.3	5.3	Waushara	4.6	5.7
Lincoln	4.4	5.5	Winnebago	4.5	5.5
Manitowoc	4.3	5.2	Wood	4.6	5.8

NR 243.05 Calculating animal units. (1) GENERAL. The total number of animal units at an operation shall be calculated using the methods in both subs. (2) and (3). The department shall compare the totals under both of these methods and shall use the highest calculated total to

determine the size of an animal feeding operation. An owner or operator of an animal feeding operation shall use form 3400-25A for calculating the number of animal units present at the operation.

Note: In accordance with the definition in s. NR 243.03(4), animals included in the total count may be housed at more than one site or location.

Note: Form 3400-25A can be obtained at regional offices of the department or the department's Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin 53707.

(2) COMBINED ANIMAL UNITS. The number of animal units present at an operation shall be calculated by multiplying the number of animals for each animal type by the appropriate equivalency factor in Table 2A. The total number of animal units at the operation is the sum of the calculated animal unit numbers of all animal types present at the operation.

Note: Under the combined animal unit calculation, an operation with 400 animal units of milking cows, 300 animal units of heifers and 200 animal units of swine would have a total of 1000 animal units present.

(3) INDIVIDUAL ANIMAL UNITS. The number of animal units present at an operation shall be calculated by multiplying the number of animals for each animal type by the appropriate equivalency factor in Table 2B. The total number of animal units at an operation is the highest calculated number of animal units for any individual animal type.

Note: Under the individual animal unit calculation, an operation with 400 animal units of milking cows, 300 animal units of heifers and 200 animal units of swine would have 400 animal units present.

(4) OTHER ANIMAL TYPES. For animal types not listed in Table 2A, the department shall base equivalency to animal units on live animal weights, the characteristics of the manure, including nutrient content or pollutant concentration, or a combination of both. In cases based strictly on live weight, 1,000 pounds of live weight is equivalent to one animal unit.

Table 2A – Combined Animal Unit Calculation Equivalencies		
Animal Type	**Combined Animal Equivalent of 1,000 Animal Units**	**Combined Animal Unit Equivalency Factor**
DAIRY CATTLE:		
Milking and Dry Cows	715	1.4
Heifers (800 to 1200 lbs)	910	1.1
Heifers (400 to 800 lbs)	1670	0.6
Calves (under 400 lbs)	5000	0.2
VEAL CALVES		
Per Animal	2000	0.5
BEEF CATTLE:		
Steers or Cows (400 lbs to Mkt)	1000	1.0
Calves (under 400 lbs)	5000	0.2
Bulls	700	1.4
SWINE:		
Pigs (55 lbs to Mkt)	2500	0.4
Pigs (up to 55 lbs)	10000	0.1
Sows	2500	0.4
Boars	2000	0.5
SHEEP:		
Per Animal	10000	0.1
HORSES:		
Per Animal	500	2.0
DUCKS:		
Per Bird (Liquid poultry manure handling)	5000	0.2
Per Bird (Non-liquid poultry manure handling)	100000	0.01
CHICKENS:		
Per Bird (Liquid poultry manure handling)	30000	0.033
Layers (Non-liquid poultry manure handling)	100000	0.01
Broilers and Pullets (Non-liquid poultry manure handling)	200000	0.005
TURKEYS:		
Per Bird	55000	0.018

Table 2B – Individual Animal Unit Calculation Equivalencies		
Animal Type	**Individual Animal Equivalent of 1,000 Animal Units**	**Individual Animal Unit Equivalency Factor**
DAIRY CATTLE:		
Milking and Dry Cows	700	1.43
Heifers (400 to 1200 lbs)	1000	1.0
VEAL CALVES		
Per Animal	1000	1.0
BEEF CATTLE:		
Steers, Bulls or Cows (400 lbs to Mkt)	1000	1.0
SWINE:		
Pigs (55 lbs to Mkt)	2500	0.4
Pigs (up to 55 lbs)	10000	0.1
SHEEP:		
Per Animal	10000	0.1
HORSES:		
Per Animal	500	2.0
DUCKS:		
Per Bird (Liquid poultry manure handling)	5000	0.2
Per Bird (Non-liquid poultry manure handling)	30000	0.0333
CHICKENS:		
Per Bird (Liquid poultry manure handling)	30000	0.0333
Layers (Non-liquid poultry manure handling)	82000	0.0123
Broilers and Pullets (Non-liquid poultry manure handling)	125000	0.008
TURKEYS:		
Per Bird	55000	0.018

NR 243.06 Variances. (1) A permittee may request a waiver or variance to a requirement of this chapter. Subject to sub. (2), the department may approve a variance from a requirement in this chapter when special circumstances show that a variance is needed and the approval of the variance will not negatively impact or threaten the environment or public health. A request for a variance shall be submitted in writing and shall specify the requirement in this chapter from which a variance is requested and the reasons a variance is needed. The department shall approve or deny the variance within 30 days after the request is submitted.

(2) The department may not grant a waiver or variance to a federal statutory or regulatory requirement or to state statutory requirement.

Note: If a permittee seeks approval of a variance to a requirement from this chapter that is specified in a WPDES permit, the permit must be modified to include the approved variance.

Consequently, permittees should consider submitting any variance requests as part of the permit application process, so if approved, the variance can be incorporated into the permit.

Note: An animal feeding operation may participate in the Environmental Results Program (also known as the Green Tier Program) pursuant to s. 299.83, Stats. For more information on this innovative program that provides regulatory flexibility and superior environmental results, please refer to www.dnr.wi.gov/org/caer/cea/environmental.

NR 243.07 Incorporation by reference. (1) CODE OF FEDERAL REGULATIONS. 40 CFR 412.22 in effect as of the effective date of the rule…[revisor insert date] is incorporated by reference for this chapter. This federal regulation references 40 CFR 125.30 through 125.32 and these federal regulations are also incorporated by reference for this chapter. Copies of these regulations are available for inspection at the offices of the department and the revisor of statutes, Madison, Wisconsin.

Note: Copies of these materials may be also be viewed online at www.gpoaccess.gov/cfr/index.html, or may be purchased for personal use from: Superintendent of Documents, U.S. Government Printing Office, PO Box 371954, Pittsburg, PA 15250-7954, phone: (202) 783-3238.

(2) OTHER MATERIALS. The materials listed in this section are incorporated by reference for this chapter. Some of the technical standards include secondary materials which are also incorporated by reference for this chapter. Copies of these materials are available for inspection at the offices of the department and the revisor of statutes, Madison, Wisconsin. The materials incorporated by reference include:

(a) NRCS Standard 313, dated December 2005. NRCS Standard 313, dated December 2005, includes all of the following materials:

1. NRCS Agricultural Waste Management Field Handbook, Part 651, chs. 9 and 10, 1992.

2. NRCS Standard 342, dated June 2002.

3. NRCS Construction Specification 4, dated September 2003.

4. NRCS Construction Specification 203, dated March 2005.

5. NRCS Construction Specification 204, dated March 2005.

6. NRCS Construction Specification 300, dated December 2005.

7. American Concrete Institute 318, Building Code Requirements for Reinforced Concrete, in effect as of the effective date of this rule…[revisor insert date].

8. ASTM Standard D-653-05.

9. ASTM Standard D-2488-00.

10. ASCE Standard SEI/ASCE 7-02.

11. ASAE Standard EP378.3.

12. ASAE Standard EP393.2.

(b) NRCS Standard 332, dated May 2002.

(c) NRCS Standard 360, dated December 2002.

(d) NRCS Standard 393, dated January 2001.

(e) NRCS Standard 585, dated June 2002.

(f) NRCS Standard 634, dated December 2005. NRCS Standard 634, dated December 2005, includes all of the following materials:

1. NRCS Construction Specification 15, Plastic Pipe Conduits, dated January 2006.

2. NRCS Standard 430DD-1, dated December 1988.

(g) NRCS Standard 635, dated January 2002. NRCS Standard 635, dated January 2002, includes all of the following materials:

1. NRCS Standard 350, dated July 2002.

2. NRCS Standard 612, dated March 2003.

Note: Copies of NRCS technical standards may be inspected at offices of the department, DATCP, NRCS, county land conservation departments and revisor of statutes, Madison, Wisconsin. Copies may also be obtained at no charge online at www.wi.nrcs.gov.

Note: Copies of ASTM Standards may be obtained online at www.astm.org or at the corresponding address: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

Note: Copies of ASCE Standards may be obtained from the American Society of Civil Engineers online at www.pubs.asce.org.

Note: Copies of ASAE Standards may be obtained from the American Society of Agricultural and Biological Engineers online at www.asabe.org.

Subchapter II – Requirements for Large Concentrated Animal Feeding Operations

NR 243.11 Large concentrated animal feeding operations. (1) APPLICABILITY. The provisions of this subchapter are applicable to existing large CAFOs, proposed expansions of existing animal feeding operations that will become large CAFOs and newly proposed large CAFOs.

Note: Owners or operators of animal feeding operations are responsible for obtaining all necessary state and local permits and approvals in addition to those outlined in this subchapter.

(2) CALCULATION OF ANIMAL UNITS. The determination as to whether an existing, proposed or expanded operation meets the criteria of a large CAFO shall be based on the total number of animal units at the animal feeding operation calculated pursuant to s. NR 243.05. Based on the provisions of this subchapter and information provided as part of an operation's application for a WPDES permit, as required in s. NR 243.12, the department shall determine whether a WPDES permit is required for an operation.

(3) WPDES PERMIT COVERAGE REQUIRED. (a) Except as provided in par. (b), any person owning or operating a large CAFO that stores manure or process wastewater in a structure that is at or below grade or that land applies manure or process wastewater shall have a WPDES permit. A discharge of pollutants from manure or process wastewater to waters of the state by an unpermitted animal feeding operation with 1,000 animal units or more is prohibited. A pasture or grazing area may operate without WPDES permit coverage.

(b) If a person owns or operates an animal feeding operation with 999 animal units or less, and that person expands its operation to 1000 animal units or more due to the purchase of another animal feeding operation, that person has 90 days from the date of the purchase to apply for a WPDES permit.

(4) ADDITIONAL INFORMATION. If requested by the department, owners or operators of animal feeding operations indicating that their operation will have 900 animal units or more shall submit additional information to the department regarding how the estimated number of animal units was calculated in accordance with Table 2A and 2B.

NR 243.12 WPDES permit application requirements. (1) GENERAL. A large CAFO may not discharge pollutants from manure or process wastewater to waters of the state unless the discharge is covered by and in compliance with a WPDES permit. Pursuant to s. 283.37(2), Stats., a complete application for a WPDES permit shall be filed in accordance with the following requirements:

(a) Except as provided for in par. (c), a person who is proposing to own or operate a large CAFO that will store manure or process wastewater in a storage facility constructed at or below grade or that will land apply manure or process wastewater shall file a preliminary application for a WPDES permit at least 12 months prior to the intended date on which the operation will become a large CAFO. The preliminary application for a WPDES permit shall consist of completed forms 3400-25 and 3400-25A. The owner or operator shall then submit a completed final WPDES permit application under sub. (2) at least 180 days prior to the intended date on which the operation would become a large CAFO. The owner or operator of a proposed large CAFO may not discharge

pollutants from manure or process wastewater to waters of the state until one of the following has occurred:

1. The department has issued an individual WPDES permit for the operation.

2. The department has granted general WPDES permit coverage to the operation under s. NR 243.121.

(b) An owner or operator of an operation that is defined as a large CAFO as of the effective date of this rule…[revisor insert date] that is not already covered by a WPDES permit or that has not already submitted a WPDES permit application, shall submit a complete permit application to the department by no later than July 31, 2007.

(c) An owner or operator of an animal feeding operation with 999 animal units or less that becomes a large CAFO as a result of the purchase of another animal feeding operation shall apply for a WPDES permit no later than 90 days from the date of the purchase.

Note: Owners or operators of an operation that has chickens or ducks with a non-liquid manure handling system, heifers, ducks or veal calves may become a CAFO for the first time due to the rule changes that became effective on the effective date of this rule…[revisor insert date]. Consequently, the department advises owners or operators to re-calculate the total number of animal units using the numbers in s. NR 243.05 and Table 2B to determine whether the operation has 1000 animal units or more and is required to obtain permit coverage.

(d) An owner or operator of a large CAFO that already holds a WPDES permit shall reapply at least 180 days prior to the expiration date of its current WPDES permit, unless all of the following apply:

1. The permittee has ceased operation or is no longer defined as a large CAFO under s. NR 243.03(28).

2. The permittee has demonstrated to the department that there is no remaining potential for a discharge of manure or process wastewater pollutants to waters of the state that was generated while the operation was a CAFO.

3. The permittee submits a letter to the department documenting that subds. 1. and 2. have been satisfied.

Note: Due to the extent of water resources in the state, it is the department's position that if the manure or process wastewater from a CAFO is land applied to sites in Wisconsin, pollutants from the manure or process wastewater will reach waters of the state either via leaching to groundwater or surface runoff. Also, it is the department's position that storage facilities constructed at or below

grade will have some pollutant discharges to groundwater. Therefore, all large CAFOs must apply for a WPDES permit.

(2) CONTENTS OF A FINAL PERMIT APPLICATION. (a) For a person applying for a first time permit issuance, a complete final permit application shall consist of the following:

1. The location of the existing or proposed site on maps including aerial photographs and soil survey maps.

2. A scaled drawing of existing and proposed animal housing, feed storage structures and other raw materials storage areas. The production area shall be clearly delineated as well as ancillary service and storage areas. Existing features shall be clearly delineated from proposed features.

3. A description and scaled drawing of existing and proposed manure storage or composting facilities, process wastewater storage or treatment facilities and other treatment systems. Plans and specifications for new manure storage or composting facilities and process wastewater facilities or proposed modifications to existing storage, composting or treatment facilities or systems shall be submitted. Upon approval by the department, plans and specifications for proposed storage, composting or treatment facilities may be submitted during the term of the permit if construction of the facilities will begin during the term of the permit. In addition, evaluations of existing storage, composting or treatment facilities or systems not previously reviewed and approved by the department shall be submitted.

Note: Stormwater construction site permit procedures and requirements outlined in ch. NR 216 may apply to construction activities.

4. A description and scaled drawing of existing and proposed runoff control systems, groundwater monitoring systems, water supply wells, permanent spray irrigation systems or other landspreading or treatment systems. Plans and specifications for new systems or proposed modifications to existing systems shall be submitted. Upon approval by the department, plans and specifications for proposed systems may be submitted during the term of the permit if construction of these facilities is planned to begin during the term of the permit. In addition, evaluations of existing systems not previously reviewed and approved by the department shall be submitted.

Note: Department approval to submit plans and specifications for proposed systems and evaluations of existing systems during the term of the permit does not delay compliance with the requirements in s. NR 243.13.

5. A description and scaled drawing of any existing and proposed ancillary service and storage areas and outside animal lots, including a map showing the area's size and location, the

number of animals to be using the area, projected number of days in use, and type and percent of vegetative cover to be maintained.

6. A complete nutrient management plan that meets the requirements of s. NR 243.14. The plan shall be based on the volume of manure that will be generated by the operation from 1,000 animal units or the number of animal units that are expected to be at the operation by the end of the first year of permit coverage, whichever is greater. The permittee shall specify the expected number of animal units at the operation for the first year of the permit and during the permit term. The plan shall include all of the following information:

a. A narrative overview of the operation's nutrient management plan including a general description of anticipated amounts and types of manure and process wastewater produced on an annual basis, amount of manure and process wastewater to be land applied, anticipated frequency of land application for manure and process wastewater, methods of land application, and other methods of use, disposal, distribution or treatment.

b. Additional information the department requests for the purpose of identifying possible water quality impacts associated with an operation's land application activities.

7. Any other information requested by the department that is necessary to comply with the requirements of ch. NR 150.

Note: The department has developed an environmental analysis questionnaire identifying most of the information needed to comply with ch. NR 150 that is included as part of a large CAFO's application package for first time issuances.

(b) For operations submitting a reissuance application, a complete reissuance application shall consist of the following:

1. Information on changes to the operation that have occurred during the current permit term and changes that are anticipated during the upcoming permit term, including changes that are necessary to comply with this chapter.

2. The location of the existing site and proposed modifications to the site on maps such as aerial photographs and soil survey maps.

3. Scaled drawing and descriptions of existing and proposed animal housing, manure storage, composting and treatment facilities, process wastewater storage or treatment facilities or systems, runoff control structures or systems, feed storage structures, groundwater monitoring systems, water supply wells, ancillary and service storage areas, loafing and outside lot areas and feed storage structures. Existing features shall be clearly delineated from proposed features.

4. An updated nutrient management plan reflecting changes that have occurred at the operation since the previous permit issuance or reissuance and that incorporates the requirements in this chapter.

5. A description of permanent spray irrigation systems and any other landspreading or treatment systems.

6. Any other information requested by the department that is necessary to comply with the requirements of ch. NR 150.

(3) APPLICATION FORMS. Final permit and reissuance application information shall be submitted along with completed forms 3400-25 and 3400-25A. The department shall take action on a complete application pursuant to s. NR 200.10.

Note: Applications and forms 3400-25 and 3400-25A can be obtained at regional offices of the department or the department's Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin 53707.

NR 243.121 General permit coverage. (1) GENERAL PERMIT. (a) The department may issue a WPDES general permit to cover a category or group of CAFOs where the department has determined that the operations will not be covered by an individual permit issued pursuant to s. 283.37(2), Stats.

(b) For purposes of this section, a category or group of CAFOs may be defined by size of operation, type of livestock or species, geographic or watershed area, method of managing manure or any other feature or attribute that the department determines is appropriate for defining a category of coverage.

(2) GENERAL PERMIT APPLICATION REQUIREMENTS. An owner or operator seeking coverage under a general permit shall submit an application to the department in accordance with s. NR 243.12 and shall include information documenting that the operation qualifies for the general permit based on the eligibility criteria specified in the general permit.

(3) GENERAL PERMIT ELIGIBILITY. The department shall specify criteria for determining eligibility for general permit coverage in the WPDES general permit.

(4) INDIVIDUAL PERMIT COVERAGE. Under s. 283.35(3), Stats., the department may withdraw general permit coverage for a CAFO and issue an individual permit to the CAFO. The CAFO shall submit additional information requested by the department that is needed for issuance of an individual permit.

Note: The department may allow a permittee to participate in a cooperative compliance program to assist the CAFO with maintaining compliance with a general permit. A cooperative compliance program is an organization comprised of several CAFOs that have been granted permit coverage under a general permit. Cooperative compliance programs primarily assist facilities in maintaining compliance with general permits. Cooperative compliance programs retain environmental experts with substantial experience and knowledge in the management of manure and nutrients, design and maintenance of agricultural best management practices and environmental protection.

NR 243.13 Standard WDPES permit requirements for large CAFOs. (1) GENERAL. The department shall include conditions in permits that meet the requirements in subs. (2) to (9), if applicable to the primary livestock type housed at the CAFO. Pursuant to s. 283.31, Stats., the department shall include conditions in a WPDES permit for the production area and ancillary service and storage areas to ensure that clean water is diverted, as appropriate, from the production area and that are necessary to achieve compliance with surface water and groundwater quality standards contained in chs. NR 102 to 105, 140 and 207, and the livestock performance standards and prohibitions prescribed in ch. NR 151.

Note: Large CAFOs are not eligible for cost sharing under chs. NR 153 and 154, nor is cost sharing necessary for compliance with the livestock performance standards and prohibitions.

(2) DAIRY COWS, CATTLE AND DUCKS. (a) The standard in this subsection applies to large CAFOs that confine mostly mature dairy cows, milking or dry, or cattle such as heifers, steer or bulls, or ducks. Except as provided in par. (b) or (c), a large CAFO may not discharge manure or process wastewater pollutants to navigable waters from the production area, unless all of the following apply:

1. Precipitation causes an overflow of manure or process wastewater from a containment or storage structure.

2. The containment or storage structure is properly designed, constructed and maintained to contain all manure and process wastewater from the operation, including the runoff and the direct precipitation from a 25-year, 24-hour applicable rainfall event.

3. The production area is operated in accordance with the inspection, maintenance and record keeping requirements in s. NR 243.19.

Note: Operations are not allowed to discharge pollutants to navigable waters under any circumstance or storm event from areas of the production area where manure or process wastewater is

not properly stored or contained by a structure. Wastewater treatment strips, grassed waterways or buffers are examples of facilities or systems that by themselves do not constitute a structure.

(b)1. The department may establish an alternative discharge limitation to the standard limitation established in par. (a) if an applicant or permittee requests an alternative limitation. When requesting an alternative site specific limitation, the applicant or permittee shall submit all of the following additional information as part of the application for WPDES permit issuance or reissuance:

a. A technical analysis, calculations and other relevant information that demonstrates that the discharge of pollutants, on a mass basis, associated with the alternative limitation will be equal to or less than the mass loading of pollutants associated with achieving the standard limitations in par. (a).

b. A calculation of daily inputs to the storage systems and all daily outputs from the storage systems, including losses due to evaporation, sludge removal, and off-site transport of manure and wastewater.

c. A calculation determining the median annual overflow volume based on a 25-year period of actual rainfall data applicable to the site.

d. Representative samples and analysis of all sources of input into the storage systems for nitrogen, phosphorus, BOD_5 and total suspended solids, or other applicable pollutant data.

e. Predicted annual average discharge of pollutants, expressed, where appropriate, as a mass discharge on a daily basis in pounds per day, and calculated considering the information in this subd. 1.b. to d.

f. Any additional information requested by the department.

2. The department may approve an alternative limitation if the alternative limitation is based on site specific alternative technologies that will achieve a quantity of pollutants discharged from the production area that is equal to or less than the quantity of pollutants that would be discharged if the production area was designed, constructed, operated and maintained in compliance with the standard limitation in par. (a). If approved, the alternative limit shall be included in the proposed WPDES permit.

(c) A large CAFO that primarily confines ducks, was in existence as of 1974 and has not completely replaced all of its production or processing equipment after 1974, may have a discharge of pollutants from the production area to navigable waters that meets the limits in 40 CFR part 412.22 provided the discharge will not exceed water quality standards. 40 CFR part 412.22 is incorporated by reference in s. NR 243.07. The department shall impose best management practices or effluent limitations on the discharge to address other pollutants associated with manure

or process wastewater or to meet surface water or groundwater quality standards. If the permittee chooses this option, the permittee shall monitor pollutants in all runoff from the production area to demonstrate compliance with effluent limitations.

Note: Copies of 40 CFR part 412.22 and the other federal regulations referenced in 40 CFR part 412.22 are available for inspection at the office of the department, Madison, Wisconsin and U.S. EPA offices.

(3) SWINE, POULTRY OTHER THAN DUCKS AND VEAL CALVES. (a) Except as provided in par. (b), a large CAFO that is an existing source CAFO that confines mostly swine, poultry other than ducks or veal calves shall comply with the requirements in sub. (2).

Note: All existing source dairy, cattle, swine, poultry other than ducks, and veal operations, are subject to the same discharge limitations related to the 25-year, 24-hour storm event as well as the same allowances for alternative discharge limitations. New source swine, poultry other than ducks, and veal calves have more restrictive discharge limitations and additional criteria for receiving alternative discharge limitations.

(b) A large CAFO that is a new source CAFO and that confines mostly swine, poultry other than ducks or veal calves may not discharge manure or process wastewater pollutants into navigable waters from the production area except as provided in par. (c). Storage and containment facilities and structures shall be designed, constructed, operated and maintained to contain all manure and process wastewater, including runoff and the direct precipitation from a 100-year, 24-hour rainfall event, and the production area shall be operated in accordance with the inspection, maintenance and recordkeeping requirements in s. NR 243.19.

(c)1. For swine, poultry other than ducks or veal calf operations that are new source CAFOs, the department may establish an alternative discharge limitation to the applicable standard limitation established in par. (b) if an owner or operator of the large CAFO requests an alternative limitation. When requesting an alternative limitation under this paragraph, the applicant shall submit all of the following additional information as part of the application for WPDES permit issuance:

a. Calculations that demonstrate that the quantity of pollutants discharged from the production area will be offset by additional best management practices that achieve an equivalent or greater reduction in the quantity of pollutants released to other media, including water and air, from the production area or land application areas. The calculations shall be made on a mass basis, where appropriate.

b. Any other specific information requested by the department that is needed by the department to make a determination pursuant to this paragraph.

2. If approved by the department, the alternative limitation shall be established in the WPDES permit and shall be based on site specific innovative technologies that will achieve an overall environmental performance across all media that is equal to, or superior to, the reductions achieved by the standard as provided in par. (b).

(4) HORSES AND SHEEP. (a) This subsection applies to large CAFOs that confine mostly horses or sheep. All large CAFOs that confine mostly horses or sheep may not discharge process wastewater pollutants into navigable waters from the production area except if both of the following are met:

1. A rainfall event causes an overflow of process wastewater from a facility or structure designed, constructed, operated and maintained to contain all process wastewater generated including the runoff from a 25-year, 24-hour rainfall event.

2. The discharge complies with water quality standards.

(b) In a WPDES permit, the department may impose additional requirements or best management practices, or other restrictions for production area discharges of manure or process wastewater to meet surface water quality or groundwater standards.

(5) ALL LARGE CAFOS. (a) If a discharge of manure or process wastewater pollutants to waters of the state occurs, including a discharge allowed under subs. (2) to (4), the discharge shall comply with groundwater and surface water quality standards.

(b) The permittee may not allow livestock to come into direct contact with navigable waters in the production area.

(6) EMERGENCY RESPONSE PLAN. (a) *General.* Within 30 days of permit issuance or reissuance, a permittee shall develop an emergency response plan, or update an existing plan if necessary, that is designed to address unauthorized spills or discharges. For purposes of this subsection, unauthorized spills or discharges include catastrophic spills resulting from failures of containment or storage structures or equipment malfunctions, leakage from pumping systems and other events creating potential environmental damage. The emergency response plan shall be maintained at the production area in a place accessible to all employees. The permittee shall notify all employees involved with manure handling of the location and contents of the emergency response plan. Relevant portions of the plan shall be retained with land application equipment and with contracted land applicators. The plan shall be implemented whenever an unauthorized spill or discharge occurs. The plan shall be made available to the department upon request.

Note: Pursuant to s. 292.11, Stats., owners or operators of CAFOs are required to report spills of hazardous substances. Under s. 292.11, Stats., manure can be considered a hazardous substance.

(b) *Plan content*. The emergency response plan shall include all of the following information:

1. The names and telephone numbers of persons who are identified by the permittee as responsible for implementing the emergency response plan.

2. Areas of the production area where potential unauthorized spills or discharges can occur, and their accompanying surface and subsurface drainage points.

3. Procedures to be followed in the event of an unauthorized spill or discharge, including the following:

a. Actions to contain, minimize and manage any unauthorized discharge.

b. Actions to mitigate the adverse effects of any unauthorized discharge.

c. Identification of contractors, equipment, equipment technical support, clean-up materials and alternative manure storage that can be used in the event of an unauthorized discharge.

d. Identification of land application sites or alternative storage facilities that can be used in the event of an unauthorized discharge during precipitation events or when soils are saturated, frozen or snow covered. Those land application sites identified shall have the lowest potential to deliver pollutants to waters of the state out of all the land application sites available to the permittee.

e. Procedures for reporting the unauthorized discharge to the permittee's main operational contact, any applicable local emergency or health authorities, and the department in accordance with permit requirements and s. 292.11, Stats.

(c) *Amendments*. The emergency response plan shall be reviewed and, if appropriate or necessary, amended whenever the operation undergoes significant expansions or other changes that affect the volume or location of potential unauthorized spills or discharges. The plan shall be amended as needed to reflect changes in available equipment, available clean-up contractors or procedures to address unauthorized spills or discharges, or amended in accordance with comments provided by the department. Dates of plan amendments shall be retained with the plan at the production area.

(7) ANCILLARY SERVICE AND STORAGE AREAS. In accordance with the terms and conditions of the WPDES permit, a permittee may discharge contaminated storm water to waters of the state from ancillary service and storage areas provided the discharges of contaminated stormwater comply with groundwater and surface water quality standards. These areas include CAFO

outdoor vegetated areas, access roads, sites used for the handling or storage of material or refuse other than manure, bedding, feed or process wastewater, areas for storage or maintenance of material handling equipment, areas for shipping and receiving, and other sources of contamination that are not identified as part of the production area. These areas do not include land application areas. The permittee shall take preventive maintenance actions and conduct periodic visual inspections to minimize the discharge of pollutants from these areas to surface waters. For CAFO outdoor vegetated areas, the permittee shall also implement the following practices:

(a) Manage stocking densities, implement management systems and manage feed sources to ensure that sufficient vegetative cover is maintained over the entire area at all times.

(b) Prohibit direct access of livestock or poultry to surface waters or wetlands located in or adjacent to the area unless approved by the department.

(c) Comply with other measures specified in the permit to prevent exceedances of groundwater and surface water quality standards.

Note: Examples of ancillary service and storage areas include access roads into the production area, pesticide storage, motor oil and fuel drums, equipment repair areas, and junk or scrap piles. These areas do not include land application areas or areas that are part of the production area. Contaminated stormwater discharges from construction site areas are subject to the WPDES permit requirements under ch. NR 216.

(8) MORTALITY MANAGEMENT. (a) Animal carcasses may not be disposed of in a manner that results in a discharge of pollutants to surface waters, violates groundwater standards or impairs wetland functional values. Animal carcasses may not be disposed of directly into waters of the state. In addition, carcasses may not be disposed of in liquid manure or process wastewater containment, storage or treatment facilities unless the containment, storage or treatment facility is adequately designed to contain and treat carcasses and the facility has been approved by the department for that use.

(b) The permittee shall maintain records of mortality management and disposal methods in accordance with s. NR 243.19.

Note: The permittee should be aware that there are additional restrictions on the disposal of animal carcasses in ch. 95, Stats., and ch. ATCP 3. Furthermore, there may be local regulations regarding disposal of carcasses. If a carcass is disposed of off-site, the disposal may be subject to the requirements in s. NR 502.12 or ch. NR 518.

Note: In accordance with s. 283.53, Stats., the term of a WPDES permit cannot exceed 5 years.

NR 243.14 Nutrient management. (1) NUTRIENT MANAGEMENT PLANS. (a) *General*. Permittees shall submit a nutrient management plan developed by a nutrient management planner qualified under s. ATCP 50.48 to the department for review and approval outlining the amounts, timing, locations, methods and other aspects regarding the land application of manure and process wastewater. A complete nutrient management plan shall be submitted with a permit application in accordance with s. NR 243.12. The nutrient management plan shall comply with the requirements of this section and the permittee's WPDES permit. Subject to additional requirements specified in this section and in a WPDES permit, the land application practices identified in the nutrient management plan shall, at a minimum, conform with the nutrient budgeting, soil test recommendations, application practices and restrictions contained in NRCS Standard 590.

(b) *Plan content.* The permittee's nutrient management plan shall contain information necessary to document how the operation's land application activities will comply with the restrictions in NRCS Standard 590, this chapter and the conditions of the operation's WPDES permit. In cases where there is limited acreage available for application, the department may require that the permittee submit additional or more specific information, including verification that the permittee has permission to land apply manure on fields not owned by the permittee. The department may require additional management practices be included in the nutrient management plan to ensure compliance with the requirements of this chapter and the permittee's WPDES permit.

Note: The Wisconsin Conservation Planning Technical Note WI-1 contains additional detail on the information that needs to be included in a plan drafted in accordance with NRCS Standard 590, as well as additional background information useful for nutrient management planning. While additional information beyond that outlined in the technical note is needed to comply with the requirements of this section, the technical note does provide general guidance on how to create a nutrient management plan.

(c) *Amendments*. 1. The nutrient management plan shall be reviewed and amended by the permittee on an annual basis to reflect any changes in operations. Except as provided in subd. 2., the management plan may be amended at any time provided the proposed amendments are approved in writing by the department. An amendment does not become effective until the department has reviewed and approved the amendment.

2. The department may establish a condition in the WPDES permit that allows the permittee to implement certain types of nutrient management plan amendments without obtaining, or prior to obtaining, department approval.

(2) GENERAL REQUIREMENTS. (a) A discharge of manure or process wastewater pollutants to waters of the state by a CAFO as a result of the land application of manure or process wastewater is subject to the WPDES permit terms and conditions except where the discharge is an agricultural storm water discharge. A permittee's land application practices for manure and process wastewater shall comply with this section, the terms and conditions of the WPDES permit and the permittee's approved nutrient management plan. Except as provided in s. NR 243.142(2), the permittee is responsible for ensuring that the manure and process wastewater generated or handled at the operation is land applied or disposed of in a manner that complies with this subchapter and the terms and conditions of the WPDES permit.

(b) A permittee who land applies manure or process wastewater shall land apply all manure and process wastewater in compliance with the following requirements:

1. Manure or process wastewater may not pond on the application site.

2. During dry weather conditions, manure or process wastewater may not run off the application site, nor discharge to waters of the state through subsurface drains.

3. Manure or process wastewater may not cause the fecal contamination of water in a well.

4. Manure or process wastewater may not run off the application site nor discharge to waters of the state through subsurface drains due to precipitation or snowmelt except if the permittee has complied with all land application restrictions in this subchapter and the WPDES permit, and the runoff or discharge occurs as a result of a rain event that is equal to or greater than a 25-year, 24-hour rain event.

5. Manure or process wastewater may not be applied to saturated soils.

6. Land application practices shall maximize the use of available nutrients for crop production, prevent delivery of manure and process wastewater to waters of the state, and minimize the loss of nutrients and other contaminants to waters of the state to prevent exceedances of groundwater and surface water quality standards and to prevent impairment of wetland functional values. Practices shall retain land applied manure and process wastewater on the soil where they are applied with minimal movement.

7. Manure or process wastewater may not be applied on areas of a field with a depth to groundwater or bedrock of less than 24 inches.

8. Manure or process wastewater may not be applied within 100 feet of a direct conduit to groundwater.

9. Manure or process wastewater may not be applied within 100 feet of a private well or non-community system as defined in ch. NR 812 or within 1000 feet of a community well as defined in ch. NR 811.

10. On a field with soils that are 60 inches thick or less over fractured bedrock, manure or process wastewater may not be applied on frozen ground or where snow is present.

11. Manure or process wastewater may not be applied on fields when snow is actively melting such that water is flowing off the field.

12. Where incorporation of land applied manure is required under NRCS Standard 590, the incorporation shall occur within 48 hours of application.

13. Manure or process wastewater may not be surface applied when precipitation capable of producing runoff is forecast within 24 hours of the time of planned application.

(c) Land application of process wastewater shall be included in the permittee's nutrient management plan and shall be done in accordance with the requirements of this section, except that process wastewater may be applied to frozen or snow covered ground in accordance with the requirements in s. NR 214.17(2) to (6) instead of subs. (6) and (7). The permittee shall specify in the nutrient management plan or permit application whether process wastewater will be applied to frozen or snow-covered ground in accordance with subs. (6) and (7) or s. NR 214.17(2) to (6).

(d) If incorporation is required under this section or the WPDES permit, the permittee shall specify the method of incorporation in the nutrient management plan.

Note: In addition to implementing practices specified in a nutrient management plan, the permittee should consider the following factors when making decisions about the timing of application and placement of manure and process wastewater on fields the ability of the soil to absorb or otherwise hold liquids associated with manure and process wastewater based on the soil's moisture content or permeability, if snow is present on a field or the ground is frozen, the prediction of temperature increases that will likely result in sudden snowmelts or pollutant movement, up slope areas contributing runoff or snow melt to the site where applications occur, and other field conditions that may contribute to runoff events.

(e) A permittees shall identify as part of its nutrient management plan, to the maximum extent practicable, the presence of subsurface drainage systems in fields where its manure or process wastewater are applied.

(f) Subject to other restrictions on application rates in this section, the permittee shall use results of manure, process wastewater and soil analyses to determine nutrient application rates for manure and process wastewater.

Note: Under s. NR 243.19, the permittee shall conduct sampling of manure, process wastewater and soils, keep records associated with sampling and land application activities and submit reports to the department regarding the sample results and land application of manure and process wastewater.

Note: Pursuant to s. NR 243.142, the permittee is responsible for land application activities of the manure and process wastewater generated by the large CAFO, including the land application activities of contract haulers and employees.

(3) NUTRIENT CREDITING. A permittee's manure and process wastewater application rates shall take into account soil nutrient levels prior to landspreading, nutrient applications from other sources, including commercial fertilizers, biosolids, first and second year manure and legume credits, and other sources of nutrients that are expected to be applied or have already been applied to land where manure or process wastewater will be applied. Adjustments shall be made to assumed nutrient credits based on actual crop yields.

(4) SWQMA APPLICATION RESTRICTIONS. (a) Subject to additional restrictions in subs. (6) and (7) for the winter season, a permittee shall choose and implement one of the following options whenever manure or process wastewater is applied on areas of fields within the SWQMA:

1. Not apply manure or process wastewater within 25 feet of a navigable water, conduit to a navigable water or wetland; and inject or immediately incorporate manure and process wastewater in all other areas within the SWQMA.

2. Not apply manure or process wastewater within 25 feet of a navigable water, conduit to a navigable water or wetland; and surface apply liquid manure and process wastewater in all other areas of the SWQMA provided that all of the following conditions are met:

a. The application is on long-term no-till ground.

b. The ground has 30% crop residue or more at the time of application.

c. The hydraulic application rate is limited to that specified in Table 3.

3. Establish a 35-foot wide vegetated buffer adjacent to the navigable water, conduit to a navigable water or wetland where there is no application of manure or process wastewater on the buffer; and comply with a practice in this subd. 3.a. or b. For the purposes of this subdivision, a vegetated buffer means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching navigable waters.

a. Inject or immediately incorporate manure and process wastewater in all other areas within the SWQMA, or

b. Surface apply in all other areas of the SWQMA provided the ground has 30% residue or more at the time of application and the hydraulic application rate is limited in accordance with Table 3.

4. Establish a filter strip that is a minimum of 21 feet wide adjacent to the navigable water, conduit to a navigable water or wetland; and comply with a practice in this subd. 4.a. or b. The filter strip shall be designed in accordance with NRCS Standard 393, dated January 2001. NRCS Standard 393, dated January 2001,is incorporated by reference in s. NR 243.07.

Note: Copies of NRCS Standard 393, dated January 2001 and documents referenced in this standard may be inspected at the offices of the department, DATCP, NRCS, county land conservation departments and the revisor of statutes, Madison, Wisconsin.

a. Inject or immediately incorporate manure and process wastewater in all other areas within the SWQMA, or

b. Surface apply in all other areas of the SWQMA provided the ground has 30% residue or more at the time of application and the hydraulic application rate is limited in accordance with Table 3.

5. Not apply manure or process wastewater within 100 feet of a navigable water or conduit to a navigable water.

6. Implement other practices within the SWQMA that are approved, in writing, by the department provided that the permittee demonstrates pollutant reductions are equivalent to, or better than, reductions achieved by not applying manure or process wastewater within 100 feet of downgradient navigable waters or conduits to navigable waters.

Note: The Wisconsin buffer initiative may provide additional information on the proper design and use of riparian buffers to best protect water quality.

Note: Demonstrations of equivalent practices may consist of model outputs, calculations or other means of demonstrating equivalent pollutant reductions.

(b) The nutrient management plan shall specify the land application practices that have been selected and will be followed on each field to meet the requirements of this subsection. Permittees implementing practices under par. (a)1., 2. or 4. shall demonstrate to the department how the practices provide for pollutant reductions equivalent to, or better than, reductions achieved by not applying manure and process wastewater within 100 feet of downgradient navigable waters or conduits to navigable waters.

(c) If the application rates in Table 3 apply pursuant to any of the requirements in par. (a)2. to 4., any additional applications made to meet the allowed nutrient crop budget shall be done with a minimum of 7 days between applications, provided the soils are not saturated.

Table 3: MAXIMUM RATES OF UNINCORPORATED LIQUID MANURE AND PROCESS WASTEWATER APPLIED WITHIN A SWQMA	
Surface Texture Class[1]	**Max Application Rate (gallons/acre)**
Fine	5,000
Medium	7,500
Coarse	10,000

[1] Fine – clay, silty clay, silty clay loam, clay loam.
Medium – sandy clay, sandy clay loam, loam, silt loam, silt.
Coarse – loamy sand, sandy loam, sand. This category includes peat and muck based on their infiltration capacity.

(5) PHOSPHORUS DELIVERY. (a) The permittee shall assess and minimize the potential for delivery of phosphorus to waters of the state from fields by applying its manure and process wastewater in accordance with one of the methods specified in subd. 1. or 2. The permittee shall specify the method it will apply to a field in the nutrient management plan.

1. Use the soil test phosphorus method specified in NRCS Standard 590. In addition, for applications to fields directly adjacent to, or that have been determined by the department to have a high potential to deliver phosphorus to, 303(d) listed waters impaired by nutrients or outstanding or exceptional resource waters, the permittee may not increase soil test phosphorus levels over a crop rotation unless the permittee receives department approval, and the permittee can demonstrate that deliverability of phosphorus to these waters will not increase as a result of increases in soil test phosphorus in the field. The permittee may not raise soil test phosphorus levels over a rotation above the optimum level for the highest phosphorus demanding crop in a rotation for a field with soil test phosphorus levels below optimum levels.

Note: Maps or written descriptions of the locations of outstanding and exceptional resource and 303(d) listed waters can be found on the department's website at http://dnr.wi.gov.

Note: In accordance with s. NR 243.14(1)(a) and NRCS Standard 590, a permittee shall determine optimum soil phosphorus levels for various Wisconsin crops are specified in University of

Wisconsin-Extension Publication A2809, “Soil Test Recommendations for Field, Vegetable and Fruit Crops.”

2. Use the phosphorus index method specified in NRCS Standard 590.

(b) If a permittee applies manure or process wastewater on fields with soil test levels greater than 100 ppm, the permittee shall comply with the requirements in both subd. 1. and 2.:

1. For fields with soil test phosphorus levels between 100 ppm and 200 ppm, the permittee shall calculate the planned average phosphorus index value for the crop rotation or for the next 4-year period, whichever time period is less. If the calculated average phosphorus index value is greater than 6, manure and process wastewater applications to that field are prohibited. If the calculated phosphorus index value is 6 or less, applications are allowed provided that the cumulative application of phosphorus from manure and process wastewater does not exceed 50% of the cumulative annual crop phosphorus removal over the rotation or the next 4 year period, whichever is less.

2. For fields with soil test phosphorus levels of 200 ppm and greater, applications of phosphorus from manure and process wastewater are prohibited unless the permittee receives department approval. The department may only approve the application if all of the following requirements are met:

a. The permittee can demonstrate that additional applications of manure or process wastewater will not significantly increase phosphorus delivery to surface waters or wetlands.

b. The permittee calculates the planned average phosphorus index value for the rotation or the next 4-year period, whichever is less and the planned average phosphorus index value is 6 or less.

c. The cumulative application of phosphorus from manure and process wastewater does not exceed 50% of the cumulative annual crop phosphorus removal over the rotation or the following 4-year period, whichever is less.

Note: Strategies for assessing and reducing phosphorus index (PI) values, algorithms, and software for calculating the Wisconsin PI can be found at http://wpindex.soils.wisc.edu/.

Note: A permittee that complies with the requirements of this section and its WPDES permit also addresses delivery of nitrogen to waters of the state.

Note: Also see s. NR 217.04(1)(a)5.

(6) SOLID MANURE WINTER RESTRICTIONS. The restrictions in this subsection apply to the land application of solid manure on frozen or snow covered ground.

(a) *Frozen ground-solid manure*. Unless prohibited under par. (c), solid manure may be surface applied on frozen ground if the manure is applied in compliance with the restrictions in Table 4 or otherwise immediately incorporated.

(b) *Snow covered ground-solid manure*. Unless prohibited under par. (c), solid manure may only be land applied to snow covered ground in accordance with the following*:*

1. If less than one inch of snow is present on the area where manure is to be land applied, the permittee may surface apply or immediately incorporate the solid manure.

Note: If there is less than one inch of snow on the ground and the ground is frozen, pursuant to par. (a), Table 4 restrictions must be followed when surface applying solid manure.

2. If one to 4 inches of snow is present on the area where manure is to be land applied, the permittee shall surface apply the manure in compliance with restrictions in Table 4 or otherwise immediately incorporate the solid manure.

3. If more than 4 inches of snow is present on the area where manure is to be land applied, the permittee shall surface apply the solid manure in compliance with the restrictions in Table 4. Incorporation of solid manure is prohibited.

Note: It is assumed that proper incorporation of solid manure is not achievable if more than 4 inches of snow is present at the time of application.

(c) High-risk runoff period. 1. Beginning January 1, 2008, solid manure may not be surface applied from February 1 through March 31 if any of the following conditions exist on the area of the field where the manure is to be applied:

a. Snow is present to a depth of one inch or greater.

b. The ground is frozen.

Note: Under the initial applicability provisions, the prohibition of surface application of solid manure during the high-risk period does not apply to an operation permitted as of the effective date of this rule…[revisor insert date], until permit reissuance or modification. An exception to delaying compliance until permit reissuance or modification is if an operation is permitted as of the effective date of this rule…[revisor insert date] and the permit requires compliance upon written department notification. Under par. (c), department notification may not require compliance prior to January 1, 2008.

Note: Solid manure may be surface applied at other times of the winter, or may be incorporated at other times during the winter, including high-risk runoff periods, if the application is done in accordance with pars. (b) and (c) and other land application requirements in this chapter.

(d) To meet the requirements of par. (c), a permittee may choose to stack solid manure generated at a production area location in accordance with s. NR 243.141(1) rather than use a storage facility that meets the design requirements in s. NR 243.15.

Table 4-Restrictions for Surface Applying Solid Manure on Frozen and Snow Covered Ground

Criteria	**Restrictions for fields With 0-6% slopes**	**Restrictions for fields with slopes > 6% and up to 9%**	**Restrictions for fields with slopes greater than 9%**
Required fall tillage practice prior to application	Chisel or moldboard plow, no-till or a department approved equivalent[A]	Chisel or moldboard plow, no-till or department approved equivalent[A]	Not allowed
Minimum % solids allowed	12%	> 20%	Not allowed
Application rate (cumulative per acre)	Not to exceed 60 lbs. P_2O_5 per winter season, the following growing season's crop P_2O_5 budget taking into account nutrients already applied, or phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less	Not to exceed 60 lbs. P_2O_5 per winter season, the following growing season's crop P_2O_5 budget taking into account nutrients already applied, or phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less	Not allowed
Setbacks from surface waters	No application allowed within SWQMA	No application allowed within 2.0 x SWQMA	Not allowed
Setbacks from downslope areas of channelized flow, vegetated buffers, and wetlands	200 feet	400 feet	Not allowed

Setbacks from direct conduits to groundwater	300 feet	600 feet	Not allowed

A – All tillage and farming practices shall be conducted in accordance with the following requirements; 0-2% slope = no contouring required, >2-6% slope = tillage and practices conducted along the general contour, >6% slope = tillage and farming practices conducted along the contour. The department may approve alternative tillage practices on a case-by-case basis in situations where conducting practices along the contour is not possible. Allowances for application on no-till fields only apply to fields where no-till practices have been in place for a minimum of 3 years.

(7) LIQUID MANURE WINTER RESTRICTIONS. The following additional restrictions in this subsection apply to the land application of liquid manure on frozen or snow covered ground:

(a) *Frozen ground-liquid manure*. Surface application of liquid manure on frozen ground is prohibited, except for an emergency situation under par. (d) or if allowed under par. (e). Injection or immediate incorporation of liquid manure is allowed on frozen ground, except if prohibited due to snow covered conditions under par. (b).

(b) *Snow covered ground-liquid manure*. Unless prohibited under par. (c) and subject to the frozen ground prohibition in par. (a), liquid manure may only be land applied to snow covered ground in accordance with the following:

1. If less than one inch of snow is present on the area where liquid manure is to be applied, surface application, injection or immediate incorporation of liquid manure is allowed.

2. If there is one to 4 inches of snow present on the area where liquid manure is to be applied, surface application of liquid manure is prohibited, except for department approved emergencies under par. (d) or if allowed under par. (e). Immediate incorporation or injection is allowed on areas where there is one to 4 inches of snow.

3. If there is greater than 4 inches of snow on the area where liquid manure is to be applied, surface application and incorporation of liquid manure is prohibited, except for department approved emergencies under par. (d) or if allowed under par. (e). Injection of liquid manure is allowed on areas where there is greater than 4 inches of snow.

(c) *High-risk runoff period*. 1. Unless there is a department approved emergency situation under par. (d), liquid manure may not be surface applied from February 1 through March 31.

Note: Prior to January 1, 2010, existing source CAFOs may surface apply liquid manure at other times of the winter. Also, during the high-risk period, liquid manure may be injected or incorporated if allowed under pars. (b) and (c) and other requirements in this chapter.

(d) *Emergency applications for liquid manure.* 1. Except as provided in subd. 3., a permittee may surface apply liquid manure on frozen or snow covered ground on an emergency basis in accordance with the restrictions in Table 5 if all of the following conditions are met:

a. The manure is from a storage or containment facility that is designed and maintained in accordance with ss. NR 243.15 and 243.17 to provide 180 days of storage for the manure.

b. The application of manure is necessitated by exceedances or expected exceedances of the margin of safety level that were unavoidable due to unusual weather conditions, equipment failure or other unforeseen circumstances beyond the control of the permittee.

c. The permittee has notified the department verbally prior to the emergency application. Unless necessitated by imminent impacts to the environment or human or animal health, the permittee may not apply manure to a field on an emergency basis until the department has verbally approved the application.

d. The permittee submits a written description of the emergency application and the events leading to the emergency application to the department within 5 days of the emergency application.

2. Allowances for emergency surface applications of liquid manure do not apply to situations where a permittee has failed to properly maintain storage capacity either through improper design or management of the storage facility, including failure to properly account for the number or volume of wastestreams entering the facility, failure to empty a storage or containment facility in accordance with permit conditions prior to the onset of frozen or snow covered ground conditions or due to an increase in animal units.

Note: The allowance for emergency surface applications in compliance with permit conditions is intended to avoid more significant impacts to human health and water quality associated with uncontrolled overflows of manure storage facilities. Causes of emergency surface applications could include conditions such as prolonged storm events or early onset of frozen ground conditions that preclude applications of manure prior to the onset of frozen or snow covered ground conditions provided that the operation made all other attempts to maintain storage volume before an emergency application became necessary.

3. The permittee shall conduct emergency surface applications of liquid manure in accordance with the restrictions in Table 5. The permittee may only conduct emergency surface applications on fields that the department has approved for emergency applications, in writing, as part of a nutrient management plan. The department may approve alternate fields and impose alternative restrictions, in writing and on a case-by-case basis, if fields that meet the restrictions in Table 5 are not available at the time of the emergency application, the permittee has explored all

other options identified in its emergency response plan and the application results in a winter acute loss index value of 4 or less using the phosphorus index.

Note: The winter acute loss index value is displayed under the heading "Acute Loss Frozen Soil PI" in the cropping screen of the Snap-Plus nutrient management software program.

Note: Reporting requirements for emergency surface applications are contained in s. NR 243.19.

(e) *Existing source CAFOs-liquid manure exception.* Prior to January 1, 2010, if an existing source CAFO does not have 180 days of storage for liquid manure as specified in s. NR 243.15, the permittee may surface apply liquid manure on frozen or snow covered ground in accordance with the restrictions in Table 5 without satisfying the emergency criteria in par. (d). If a permittee does not have access to sites that meet the criteria in Table 5, the department may approve alternate sites and restrictions, in writing on a case-by-case basis as part of a nutrient management plan provided the application results in a winter acute loss index value of 4 or less using the phosphorus index. This allowance for existing source CAFOs to surface apply liquid manure on frozen or snow covered ground without satisfying the emergency criteria in par. (d) is not applicable after January 1, 2010.

Note: An existing source CAFO is defined under s. NR 243.115(1).

(f) *Frozen liquid manure*. Liquid manure that is frozen and cannot be transferred to a manure storage facility may be surface applied on frozen or snow-covered ground in accordance with the restrictions in Table 5. Surface applications of frozen liquid manure do not require prior department approval or notification provided application sites for frozen liquid manure are identified in the approved nutrient management plan. During February and March, the permittee shall notify the department if the permittee expects to surface apply frozen liquid manure more than 5 days in any one month.

Note: Applications of frozen manure under par. (f) are limited to times when the operation's manure handling system is not functioning due to very cold weather.

Table 5–Frozen and Snow Covered Ground Restrictions – Emergency Surface Applications of Liquid Manure

Criteria	Restrictions for fields with 0-2% slopes	Restrictions for fields with >2-6% slopes	Restrictions for fields with slopes greater than 6%
Required fall tillage practice prior to application	Chisel or moldboard plow or department approved equivalent[A]	Chisel or moldboard plow or department approved equivalent[A]	Not allowed
Application rate (cumulative per acre)	Maximum application volume of 7,000 gallons per acre per winter season, not to exceed 60 lbs. P_2O_5, the following growing season's crop P_2O_5 budget taking into account nutrients already applied or other phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less	Maximum application volume of 3,500 gallons per acre per winter season, not to exceed 30 lbs. P_2O_5, the following growing season's crop P_2O_5 budget taking into account nutrients already applied, or other phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less	Not allowed
Setbacks from surface waters	No application allowed within SWQMA	No application allowed within SWQMA	Not allowed
Setbacks from downslope areas of channelized flow, vegetated buffers, wetlands	200 feet	200 feet	Not allowed
Setbacks from direct conduits to groundwater	300 feet	300 feet	Not allowed

A – All tillage and farming practices shall be conducted along the contour in accordance with the following requirements; 0-2% slope = no contouring required, >2-6% slope = tillage and practices conducted along the general contour. The department may approve alternative tillage practices on a case-by-case basis in situations where conducting practices along the contour is not possible

(8) IDENTIFICATION OF SITES. The permittee shall submit sites that meet or are expected to meet the criteria in Tables 4 and 5 for manure and the criteria in s. NR 214.17(2) to (6) for process wastewater to the department for review and approval as part of its nutrient management plan. In addition, the permittee shall evaluate each field at the time of application to determine if conditions are suitable for applying manure and complying with the requirements of this section. All surface applications of manure or process wastewater on frozen or snow-covered ground shall occur on those fields that represent the lowest risk of pollutant delivery to waters of the state and where the application results in a winter acute loss index value of 4 or less using the phosphorus index.

(9) ADEQUATE STORAGE. All permittees shall have and maintain adequate storage for all manure and process wastewater generated at the operation to ensure that wastes can be properly stored and land applied in compliance with the conditions and timing restrictions of the permit, nutrient management plan and this chapter. As part of the nutrient management plan, the permittee shall provide the department with documentation that it has adequate storage and methods of maintaining adequate storage for manure and process wastewater generated at the operation. For liquid manure, adequate storage means a minimum of 180 days of storage designed and maintained in accordance with ss. NR 243.15(3)(i) to (k) and 243.17(3) and (4).

(10) ADDITIONAL RESTRICTIONS. The department may require the permittee to implement practices in addition to or that are more stringent than the requirements specified in this section when necessary to prevent exceedances of groundwater quality standards, prevent impairments of wetland functional values, prevent runoff of manure or process wastewater during dry weather conditions or to address previous manure or process wastewater runoff events or discharges from a site to waters of the state that occurred despite compliance with this section and the conditions of a WPDES permit. These conditions may include additional restrictions on nitrogen and phosphorus loadings or other nutrients and pollutants associated with the manure or process wastewater, injection or incorporation requirements, restrictions on winter landspreading, distribution schedules, and other management or site restrictions. The department may also consider nutrient management conditions contained in ch. ACTP 50 as well as the following site-specific factors when developing permit conditions or reviewing and approving the nutrient management plan or any proposed amendments to an approved nutrient management plan:

(a) Soil limitations such as permeability, infiltration rate, drainage class and flooding hazard.

(b) Volume and water content of the waste material.

(c) Available storage capacity and method of application.

(d) Nutrient requirements of the crop or crops to be grown on the fields utilizing the manure.

(e) The presence of subsurface drainage systems.

(f) Potential impacts to waters identified as source water protection areas.

(g) Potential impact to groundwater in areas with direct conduits to groundwater, shallow soils over bedrock, highly permeable soils and shallow depth to groundwater.

NR 243.141 Manure stacking. (1) STACKING TO AVOID SURFACE APPLICATIONS IN FEBRUARY AND MARCH. For solid manure with a solids content of 16% or greater, the department may approve stacking of the manure outside of a department approved manure storage facility where a permittee chooses to stack solid manure in accordance with s. NR 243.14(6)(d). Permittees choosing to stack solid manure under s. NR 243.14(6)(d) shall land apply all stacked manure from a site within 8 months of the date when stacking first began at the site.

(2) OTHER STACKING ALLOWANCES. For periods when the ground is not frozen or snow-covered, the department may approve stacking of solid manure with a solids content of greater than 32% outside of a department approved manure storage facility on a case-by-case basis as allowed under a WPDES permit. Factors the department shall consider when approving stacking of solid manure on a case-by-case basis include the potential for leachate or runoff from the stack causing exceedances of surface water or groundwater quality standards or impairments to wetland functional values, information submitted or proposed to be submitted by the permittee outlining leaching and runoff characteristics of the manure, and practices to be implemented by the permittee to minimize the potential for leachate or runoff from the stack such as limiting the frequency, volume of manure to be stacked and length of stacking period.

(3) STACKING CONDITIONS. All proposed stacking sites shall be reviewed and approved by the department and identified in the permittee's nutrient management plan. Stacking approvals may be rescinded based on documented impacts to waters of the state at or from the stacking site. Stacking may only be approved provided the following requirements are met:

(a) When piled in a stack, the solid manure stack must be able to maintain its shape with minimal sloughing such that an angle of repose of 45 degrees or greater is maintained when the manure is not frozen.

(b) Stacking of solid manure outside of a department approved manure storage facility shall, at a minimum, meet the specifications in NRCS Standard 313, Table 9, dated December 2005. Alternatively, stacks may be placed on sites with soils in the hydrologic soil group D provided the manure has a solids content of greater than 32% and all other criteria in NRCS Standard 313, Table

9, dated December 2005, are met. NRCS Standard 313, dated December 2005, is incorporated by reference in s. NR 243.07.

Note: Copies of NRCS Standard 313, dated December 2005 and documents referenced in this standard may be inspected at the offices of the department, DATCP, NRCS, county land conservation departments and the revisor of statutes, Madison, Wisconsin.

(c) The permittee shall implement any necessary additional best management practices to ensure stacking areas maintain compliance with the production area requirements in s. NR 243.13. Best management practices may include upslope clean water diversions or downslope containment structures.

Note: Manure with a solids content of approximately 20% or less may not meet the stacking criteria either because it cannot be stacked or is prone to runoff. This manure may require storage in a constructed facility during the months of February and March.

Note: Manure stacks are considered to be part of the animal production area and are subject to production area discharge restrictions in s. NR 243.13. For CAFOs, if a manure stack is not placed in a containment or storage structure or the runoff from the stack is not contained in a structure, discharges to navigable waters are not allowed under any circumstance or storm event.

(d) The stacked manure shall have minimal leaching so that leachate from the stack is contained within the designated stacking area and does not cause an exceedance of groundwater quality standards.

(e) Solid manure may not be stacked in a water quality management area.

(f) Stacks may only be placed on cropland.

(4) The department may require additional restrictions on stacking of solid manure needed to protect water quality, that include acceptable time periods for stacking, how long the manure stacks may remain in place, size of manure stacks, stack siting restrictions based on slope and soil conditions, loading and resting requirements of stacking sites, conservation practices and site monitoring requirements.

NR 243.142 Responsibility for large CAFO manure and process wastewater. (1) GENERAL. Except as provided in sub. (2), the owner or operator shall be responsible for the storage, management and land application of all manure and process wastewater generated by the operation in accordance with terms and conditions contained in the WPDES permit and the approved nutrient management plan.

Note: If manure or process wastewater is stored or sent out of the state of Wisconsin, it is not regulated under ch. NR 243 or the WPDES permit once it is out of the state.

(2) EXEMPTIONS. Upon written department approval as required under sub. (3), once the manure or process wastewater is distributed offsite, the permittee is not responsible for the land application, use or disposal of manure or process wastewater if the manure or process wastewater is distributed in compliance with the conditions of the department approval and in accordance with any of the following:

(a) *De minimus quantity of solid manure distributed.* A de minimus amount of solid manure is sold or given away to another person. Under this paragraph, a de minimus amount of solid manure means the total quantity of manure distributed to the other person is no more than 175 cubic feet within a 30-day period and no more than 525 cubic feet within a 12-month period.

(b) *Distributed as a commercial product*. 1. The manure is sold or given away to another person and that person manipulates the manure, and distributes it as a commercial fertilizer pursuant to a fertilizer license issued by DATCP or distributes it as a soil or plant additive pursuant to a soil and plant additive license issued by DATCP.

2. The permittee manipulates the manure and distributes it as a commercial fertilizer pursuant to a fertilizer license issued by DATCP or distributes it as a soil or plant additive pursuant to a soil and plant additive license issued by DATCP. The permittee is responsible for the manipulated manure until is distributed off-site to another person.

Note: If the permittee manipulates the manure and distributes the manure under a DATCP license, the permittee is responsible for the manure and the manipulated manure is subject to the WPDES permit requirements until it is distributed off-site (off of any part of the CAFO) to another person. Transfer of responsibility can only occur if the conditions in sub. (3) are met.

(c) *Alternative uses of distributed manure*. For solid manure, the manure is sold or given away to another person for landscaping, greenhouse use, use as an animal bedding product or for other beneficial purposes that do not include application to croplands.

(d) *Manure or process wastewater is distributed to another permittee.* The manure or process wastewater is sold or given away to another operation permitted under a WPDES permit that has a department approved management plan that addresses the manure or process wastewater, and the manure or process wastewater will be land applied under the other permit.

(e) *Composted manure.* The manure is sold or given away to another person who composts the manure and the department has determined that the composting process and land application or use of the distributed manure will be more appropriately regulated under ch. NR 518.

(3) DEPARTMENT APPROVAL. If a permittee wants to transfer responsibility to another person for the land application, disposal or use of manure or process wastewater that will be distributed in accordance with one of the methods in sub. (2)(b) to (e), the permittee shall obtain written department approval for the distribution. If written approval is not obtained, the permittee remains responsible for the land application, disposal and use of the distributed manure or process wastewater in accordance with the terms of the permit and this chapter. To obtain department approval for the purposes of transferring responsibility, the permittee shall comply with all of the following conditions:

(a) Neither the permittee, its agent or a contract hauler working on behalf of the permittee may land apply the distributed manure.

(b) The permittee shall demonstrate to the department that the distributed manure will be beneficially used.

(c) If the manure is distributed in accordance with sub. (2)(b) or (c), and if the person receiving the manure intends to store the manure, the permittee shall demonstrate to the department that the distributed manure will be delivered to proper storage. For purposes of this paragraph, proper storage means one of the following:

1. The distributed manure will be stored in a facility that complies with NRCS Standard 313, December 2005.

2. The distributed manure will be stored in a manner that will not cause exceedances of groundwater and surface water quality standards and will not impair wetland functional values.

Note: Proper storage may include manure stored in bags provided that the manure is dry enough to avoid leachate generation.

Note: A permittee does not need to obtain approval from the department to transfer responsibility for de minimus amounts of manure under sub. (2)(a).

(4) REVOCATION OF APPROVAL. The department may revoke its approval of the responsibility transfer if the department determines that the conditions of approval are not being met by the permittee or recipients of the manure.

(5) RECORDKEEPING AND REPORTING. (a) The permittee shall estimate the amount of manure and process wastewater distributed under sub. (2) in its nutrient management plan and record the actual amount distributed at the time of distribution. The permittee shall create and maintain records that identify the name and address of the recipient of the distributed manure or process wastewater, the quantity distributed, and the dates of distribution. The permittee shall keep these records for at least 5 years and shall make them available to the department upon request.

The permittee shall report the amount of manure distributed under sub. (2) to the department in the annual report.

(b) Prior to distribution, the permittee shall notify the recipient, in writing, of the nutrient content of the distributed manure and process wastewater based on the most recent representative sampling information that has been conducted in accordance with the permittee's WPDES permit. At a minimum, the permittee shall provide information to the recipient regarding the nitrogen and phosphorus content of the manure.

NR 243.15 Design, submittal and approval of proposed facilities or systems. (1) SUBMITTAL AND APPROVAL. (a) *Plans and specifications.* 1. Plans and specifications for proposed reviewable facilities or systems shall be submitted as part of the permit application unless written department approval is received for a later submittal. Plans and specifications shall be submitted during the term of the permit if construction of a reviewable facility or system or a modification to an existing reviewable facility or system is proposed during the term of the permit. Submittal of plans and specifications shall meet the requirements in s. NR 108.04(2). Plans and specifications submitted for department approval shall include a narrative describing the proposed facility or system, a written management and site assessment, scaled drawings, an operation and maintenance plan and relevant calculations for the proposed facility or system. An owner or operator may not commence construction of a proposed reviewable facility or system until plans and specifications have been approved by the department in writing.

Note: Department approval should not be viewed as a guarantee that the approved facility or system or permittee can or will comply with WPDES permit conditions.

2. Barnyards, feedlots and reviewable facilities or systems may not be located within 250 feet of a private well or noncommunity system as defined in ch. NR 812 or within 1000 feet of a community well as defined in ch. NR 811.

3. Owners or operators of large CAFOs shall, at a minimum, design and construct reviewable facilities or systems that are part of the production area to meet the production area requirements in s. NR 243.13, accepted management practices, and the adequate storage requirements under ss. NR 243.14(9) and 243.17(3). All proposed plans and specifications, including the operation and maintenance plan, shall include a written explanation regarding the ability of the proposed facility or system to meet the production area requirement in s. NR 243.13 and the adequate storage requirements under ss. NR 243.14(9) and 243.17(3).

4. The department may require the submittal of additional information necessary to meet the requirements of ch. NR 150.

(b) *Department approval*. The department shall review and approve, conditionally approve or reject the plans and specifications in accordance with the timelines established in s. 281.41, Stats.

Note: In accordance with s. NR 108.04, submittals shall occur at least 90 days prior to the anticipated date upon which the owner or operator plans to commence construction.

Note: Department approval may be in addition to any local or county approvals needed. Also, a storm water construction WPDES permit may be required prior to construction pursuant to ch. NR 216.

(c) *Alternative practices or designs*. When the owner or operator of the large CAFO demonstrates that accepted management practices or those practices or design standards specified in this section are more stringent than necessary to avoid a detrimental effect on water quality, the department may approve alternative practices or design standards. This demonstration may be made during the permit issuance process under ch. 283, Stats., or during the plan review process under this section. The department may only approve alternative practices or design standards if the owner or operator can demonstrate that the design and operation of the alternative practices will achieve compliance with the requirements of ss. NR 243.13 and 243.14(9), surface water and groundwater quality standards and the 180-day storage requirement in s. NR 243.17(3).

(d) *Additional requirements*. As part of its written approval of plans and specifications, the department may require that accepted management practices or design standards or those practices or design standards specified in this section be superseded by more stringent operational or design requirements or practices, based on the following site-specific conditions:

1. Physical location of the facilities or systems, including depth to groundwater and bedrock and proximity to surface waters and wetlands.

2. Soil limitations such as permeability, infiltration rate, drainage class and flooding hazard.

3. Volume and water content of the waste material.

4. Available storage capacity and method of application.

5. Additional requirements or practices necessary to prevent exceedance of groundwater or surface water quality standards or impairments to wetland functional values.

(2) RUNOFF CONTROL. Runoff control systems in the production area shall be designed to comply with the applicable standards in s. NR 243.13 using permanent runoff control systems that are consistent with accepted management practices such as wastewater treatment strips, sediment basins, waste storage facilities, roof runoff management, grassed waterways and clean water diversions.

Wastewater treatment strips shall be designed in accordance with NRCS Standard 635, dated January 2002. NRCS Standard 635, dated January 2002, is incorporated by reference in s. NR 243.07.

Note: Copies of NRCS Standard 635, dated January 2002 and documents referenced in this standard may be inspected at the offices of the department, DATCP, NRCS, county land conservation departments, and the revisor of statutes, Madison, Wisconsin.

Note: In accordance with s. NR 243.13(2), operations are not allowed to discharge pollutants to navigable waters under any circumstance or storm event from parts of the production area where manure or process wastewater is not properly stored or contained by a structure. Wastewater treatment strips, grassed waterways or buffers are examples of facilities or systems that by themselves do not constitute a structure.

(3) STORAGE OR CONTAINMENT. Permittees proposing to construct storage or containment facilities shall design and install facilities that, at a minimum, meet the following requirements:

(a) *Nutrient management*. Storage and containment facilities shall be designed to provide storage capacity that is consistent with the department approved nutrient management plan and the requirement in ss. NR 243.14(9) and 243.17(3).

(b) *Alarm systems*. For storage or containment facilities that are either covered, buried or otherwise concealed in a manner that does not allow visual inspection of the level of manure or process wastewater in the facility, submitted designs shall include installation of a monitoring or alarm system to prevent overflows from the facility.

(c) *Leakage collection or monitoring*. 1. The permittee shall assess if a leakage collection or monitoring system or secondary containment system is necessary to prevent discharges of manure and process wastewater to groundwater or surface waters and include the assessment as part of submitted plans and specifications. If the permittee determines that these systems are necessary, it shall include plans and specifications for these systems as part of its submittal. Components of a collection or monitoring system design may include secondary containment associated with liner installation, leachate collection, leachate recirculation, monitoring sumps or monitoring wells. Components of secondary containment may include concrete or earthen berms or diversions designed to temporarily collect or divert overland flow away from surface waters or areas susceptible to groundwater contamination.

2. The department may require the installation of a leakage collection or monitoring system or secondary containment based on the following considerations:

a. Whether facilities are located on or near areas that are susceptible to groundwater contamination such as direct conduits to groundwater, sandy soils, and sites with minimal separations between bedrock and high water tables.

b. The size and depth of the facility.

c. The type of liner used.

d. Characteristics of waste being stored.

e. Other considerations based on potential impacts to waters of the state.

(d) *Process wastewater*. Storage and containment facilities for process wastewater that are stored separately from manure shall be designed and constructed in accordance with ch. NR 213 and shall be designed to achieve compliance with the applicable standards in ss. NR 243.13 and 243.14(9).

(e) *Permanent markers.* Liquid manure and process wastewater storage and containment facilities shall be constructed with permanent markers to clearly indicate the margin of safety level and maximum operating levels. Liquid manure storage and containment facilities shall also have a marker near the bottom of the facility indicating the level at which the facility provides 180 days of storage.

(f) *Standard 313*. Manure storage and containment facilities constructed after the effective date of this rule …[revisor insert date] shall, at a minimum, be designed and constructed in accordance with the design criteria contained in NRCS Standard 313, December 2005.

(g) *Solid manure-storage design capacity*. Subject to par. (h), all permittees shall have properly designed storage for all solid manure generated by the CAFO during February 1 through March 31 or shall obtain department approval to stack manure under s. NR 243.141.

(h) *Solid manure-timeframe for compliance*. 1. Except as provided in subd. 2., after the effective date of this rule…[revisor insert date], all permit issuances, reissuances and modifications shall require that permittees provide solid manure storage for at least the time period from February 1 through March 31 or obtain department approval to stack manure under s. NR 243.141. If solid manure storage capacity is not obtained by an existing source CAFO at the time of public notice for a proposed permit reissuance or modification, the department shall include an evaluation and a schedule in the proposed permit to ensure that storage capacity is available by November 30th after permit reissuance or modification.

2. If an owner or operator of a large CAFO holds a WPDES permit on the effective date of the rule…[revisor insert date] that requires compliance with the revised land application

requirements in s. NR 243.14 upon department notification of rule changes, then the permittee shall meet the requirements in par. (g) by January 1, 2008.

(i) *Liquid manure-new source CAFOs*. All proposed liquid manure storage or containment facilities for new source CAFOs shall be designed and constructed to provide a minimum of 180 days of storage in accordance with par. (k). The design shall include a level indicator on the storage or containment facility indicating when the necessary amount of material has been removed to provide 180 days of storage. At the time of permit issuance or prior to November 30 after permit issuance, all new source CAFOs shall have properly designed liquid manure storage or containment facilities or a system of designed facilities that can contain, at a minimum, all liquid manure generated by the large CAFO for the animals present at the operation and other waste sources directed to the storage facility during any 180-day period. Properly designed storage is storage that meets the design requirements in par. (f). If a new source CAFO does not have at least 180 days of storage at the time of public notice of a proposed permit, the WPDES permit shall contain a construction schedule in order to ensure that an operation has a design volume of at least 180 days of storage prior to November 30.

(j) *Liquid manure-existing source CAFOs*. By January 1, 2010, all existing source CAFOs shall have liquid manure storage or containment facilities that are properly designed to provide a minimum of 180 days of storage in accordance with par. (k). All plans and specifications submitted on or after January 1, 2010 for proposed liquid manure storage or containment facilities by existing source CAFOs shall be designed to continue to provide a minimum of 180 days of storage in accordance with par. (k). The design shall include a marker near the bottom of the facility indicating when the necessary amount of material has been removed to provide 180 days of storage. The department may include requirements for evaluations, plan and specification submittal and construction schedules in permits prior to January 1, 2010 if necessary to insure that an operation meets the requirements for 180 days of storage for liquid manure storage or containment facilities by January 1, 2010.

(k) *Calculating design volume*. Design volume for providing 180 days of storage for liquid manure shall be calculated based on the maximum animals present at an operation for the period of time liquid manure and other wastes mixed with the liquid manure are to be stored during any 180-day period and other design considerations. Liquid manure that is not directed to any facility or structure covered by the operation's WPDES permit may be subtracted from the design volume calculations. At a minimum, design volume shall include all of the following:

1. Capacity for liquid manure that will be stored as well as process wastewater and other wastes that will be mixed and stored with the liquid manure.

2. Anticipated direct precipitation, runoff directed to the facility and evaporation for the 180-day storage period, including direct precipitation and runoff from a 100-year, 24-hour storm event for swine, veal and poultry operations that are new source CAFOs or a 25-year, 24-hour storm event for all other operations.

3. A margin of safety.

4. Other design and storage considerations specified in NRCS Standard 313, dated December 2005.

Note: 180 days of design storage is not required for process wastewater if process wastewater is stored separately from liquid manure. Requirements for storage of process wastewater are contained in s. NR 243.15(3)(d).

(4) TRANSFER SYSTEMS. Manure and process wastewater transfer systems constructed after the effective date of this rule …[revisor insert date] shall be designed, constructed and operated in accordance with the criteria contained in NRCS Standard 634, dated December 2005. NRCS Standard 634 , dated December 2005 is incorporated by reference in s. NR 243.07.

Note: Copies of NRCS Standard 634, dated December 2005, and documents referenced in this standard may be inspected at the offices of the department, DATCP, NRCS, county land conservation departments, and the revisor of statutes, Madison, Wisconsin.

(5) DIGESTERS FOR BIOGAS PRODUCTION. After the effective date of the rule…[revisor insert date], digester facilities for biogas production shall be designed and constructed in accordance with NRCS Standard 313, December 2005. The department may apply additional design requirements in accordance with ch. NR 213 based on materials added or chemical characterization of the digester influent or effluent. Plans and specifications for digesters shall be submitted in accordance with sub. (1). At a minimum, the following information shall be included in the plans and specifications submitted for the construction of a digester for biogas production:

(a) The adequacy of each facility's proposed linings to prevent exfiltration of manure, untreated or digested, and other pollutants to groundwater.

(b) The proximity of bedrock and the water table to the proposed elevation of each facility's floors verified through onsite soil test borings or pits.

(c) Additional design considerations based on operation of the digester, including use of additives and operational temperatures.

(6) PERMANENT SPRAY IRRIGATION SYSTEMS. Proposed permanent spray irrigation and other treatment systems shall at a minimum meet the requirements of s. NR 214.14, soil investigation and groundwater monitoring criteria in ss. NR 214.20 and 214.21, and land application requirements specified in s. NR 243.14.

Note: Permanent spray irrigation systems are considered a reviewable system or facility; therefore, plans and specifications must be submitted to the department in accordance with sub. (1).

(7) GROUNDWATER MONITORING. The department may require the installation of groundwater monitoring wells in the vicinity of manure storage facilities, runoff control systems, permanent spray irrigation systems and other treatment systems where the department determines monitoring is necessary to evaluate impacts to groundwater and geologic or construction conditions warrant monitoring. If a groundwater monitoring system is required, plans and specifications for a monitoring system shall be submitted and the system shall, at a minimum, be designed, constructed and monitored in accordance with chs. NR 140 and 141 and s. NR 214.21.

(8) COMPOSTING FACILITIES. The department shall determine if the design and operation of a manure or animal carcass composting facility that is part of the production area is more appropriately approved under this section or ch. NR 502. This determination shall be based on factors such as the type of materials mixed with the manure or animal carcass and the amount and source of the materials, the method of composting and the characteristics of the final composted material. If the department determines that design and operation requirements for a composting facility are appropriately reviewed and approved under this section, the department may still apply additional design and operation requirements contained in ch. NR 502 as needed to protect water quality and shall apply additional design and operation requirements as needed to meet the requirements in ss. NR 243.13 and 243.14(9).

(9) FEED STORAGE. Proposed feed storage facilities and associated runoff control systems shall be designed and constructed to ensure that leachate and contaminated runoff are collected or controlled in a manner that complies with the applicable production area requirements in s. NR 243.13 and adequate storage requirements in s. NR 243.14(9). Plans and specifications submitted to the department for proposed feed storage facilities shall include an evaluation of the need for underground leachate collection to prevent exceedances of groundwater quality standards.

(10) CONSTRUCTION AND POST CONSTRUCTION. All facilities or systems shall be constructed in accordance with the approved plans and specifications. After construction of a reviewable facility or system has been completed, the WPDES permit applicant or permittee shall submit a post-construction report to the department that includes:

(a) Scaled drawings of the constructed facility or system.

(b) Documentation that construction has complied with approved plans and specifications and applicable design standards.

NR 243.16 Evaluations of previously constructed facilities or systems. (1) All owners or operators applying for a WPDES permit shall submit an evaluation of any constructed reviewable facilities and systems not previously approved or evaluated by the department, as part of the application for a WPDES permit. Evaluations shall be submitted under the signature and the seal of a professional engineer registered in Wisconsin or other qualified individual. At a minimum, evaluations shall include the following information:

(a) A narrative providing general background and operational information on existing facilities and systems.

(b) Available post-construction documentation including the date and materials of construction.

(c) For facilities or systems that are part of the production area, an assessment of the ability of the facility or system to meet the production area requirements in s. NR 243.13, the adequate storage requirement under s. NR 243.14(9), and accepted management practices.

(d) An assessment of the ability of the facility or system to meet the applicable design requirements identified in s. NR 243.15.

(e) Any proposed actions to address issues identified as part of the evaluation.

(2) The department may require an evaluation of a constructed facility or system previously reviewed and approved or evaluated by the department based on factors including the age of the facility or system, the facility's or system's ability to meet current design standards, requirements of this chapter or permit conditions, identified environmental impacts or physical location of the storage facility relative to waters of the state.

(3) The department may require additional practices, conditions or permittee actions based on department review of submitted evaluations of previously constructed structures or systems. This includes the installation of a leakage collection or monitoring system, secondary containment systems, or groundwater monitoring, increased inspection frequency, or replacement, upgrade or closure of systems or structures in order to ensure compliance with requirements in ss. NR 243.13 and 243.15, prevent exceedances of groundwater or surface water quality standards or to prevent impairments to wetland functional values.

(4) By January 1, 2010, permittees shall have or install the permanent markers specified in s. NR 243.15(3)(e) to previously constructed liquid manure and process wastewater storage or containment facilities.

NR 243.17 Operation and maintenance. The permittee shall operate all constructed facilities and systems in accordance with applicable requirements of s. NR 243.13, the operation and maintenance plan for a given facility or system, and WPDES permit conditions.

(1) DIGESTER FACILITIES (a) *Influent and effluent characterization*. 1. Prior to introducing any additives to a digester, other than manure, the permittee shall obtain written department approval. If any materials other than manure are used in the digester, the permittee shall maintain daily records of the volumes of all manure and non-manure components added to the digester influent.

2. The department may require monitoring for additional pollutants, including metals, based on the characterization of digester additives or the digester influent or effluent.

3. The department may apply additional requirements under chs. NR 213 and 214 if either:

a. Materials other than manure comprise 10% or greater of the total digester volume.

b. The department determines that the chemical characterization of the digester influent or effluent warrants additional requirements.

(2) CHEMICAL ADDITION OR DISPOSAL. (a) *Additive approval*. Except as provided in par. (b), the permittee shall notify the department and obtain written department approval prior to adding any chemicals, pollutants or other wastes to any manure, process wastewater, or stormwater storage facility or treatment system. In this section, other wastes means any waste other than manure, process wastewater or stormwater. Factors the department will consider when approving a chemical or pollutant include:

1. The beneficial use or purpose of the chemical or pollutant.

2. The potential impact the storage or land application of the mixed waste containing the chemical or pollutant may have on waters of the state.

(b) *Exceptions.* The WPDES permit may specify certain additives for which written department approval is not required before adding the substance to a treatment or storage facility.

(c) *Prohibited materials*. Medical wastes, including expired or unused antibiotics, petroleum products not designed for use in manure storage facilities, pesticides, paints, solvents and hazardous wastes may not be disposed of in storage or treatment facilities specified in par. (a).

(3) LIQUID MANURE-MAINTAINING 180 DAYS OF STORAGE. (a) Except as provided in sub. (4), once a permittee has constructed or established properly designed manure storage or containment facilities or a system of properly designed facilities that provide a minimum of 180 days of storage for liquid manure pursuant to s. NR 243.15(3)(i) or (j), the operation shall operate and maintain the storage facilities or system such that the 180-day design requirement is met for all animals onsite, except as allowed under sub. (4).

(b) Liquid storage facilities or systems shall be emptied so that the 180-day level indicator, specified in s. NR 243.15(3)(i) or (j), is visible on at least one day between October 1 and November 30, except for liquid manure remaining due to unusual fall weather conditions prohibiting manure applications during this time period. The permittee shall record the day on which the 180-day level indicator was visible during this time period. Permittees unable to empty their storage facility to the 180-day level indicator between October 1 and November 30, shall notify the department by December 5.

(c) Permittees shall demonstrate compliance with the 180-day design storage capacity requirement at all the following times:

1. As part of an application for permit issuance and reissuance.

2. At the time of submittal of plans and specifications for proposed reviewable facilities or systems.

3. In annual reports to the department.

4. Subject to sub. (4), when a facility is proposing, at any time, a 20% expansion in animal units or an increase by an amount of 1,000 animal units or more.

(4) LIQUID MANURE-EXCEPTIONS TO MAINTAINING 180 DAYS OF STORAGE. (a) Permittees that have maintained a minimum of 180 days of storage capacity for liquid manure in accordance with sub. (3) may be allowed to temporarily reduce this level of minimum required design capacity to 150 days design capacity if all of the following are met:

1. The reduction in storage is related to a planned increase in animal units.

2. The permittee notifies the department in writing of the proposed reduction prior to the planned expansion and reduction in 180-day design storage.

3. The permittee has a department approved expansion plan and schedule outlining how the operation will acquire or construct additional storage to achieve 180 days of storage after the expansion. The proposed schedule to acquire or construct additional storage may not exceed 24 months from the date of notification.

(b) Failure to maintain 180 days of storage under this paragraph is not reason for allowing emergency applications of liquid manure under s. NR 243.14(7)(d).

Note: The 180-day storage capacity includes process wastewater and other wastes mixed and stored with liquid manure. See s. NR 243.15(3)(k).

(5) SOLID MANURE-MAINTAINING STORAGE DURING FEBRUARY AND MARCH. Pursuant to s. NR 243.15(3)(g) and (h), once a permittee has constructed or established properly designed manure storage facilities or a system of properly designed facilities that provide storage for solid manure generated at an operation site during February 1 through March 31, the operation shall operate and maintain the storage facilities or system to continue to provide storage for all solid manure generated at the operation site from February 1 to March 31, or otherwise obtain department approval to stack some or all of the manure in accordance with ss. NR 243.14(6)(d) and 243.141(1).

(6) DISCHARGE PREVENTION. A permittee shall operate and maintain storage and containment facilities to prevent overflows and discharges to waters of the state.

(a) The permittee may not exceed the maximum operating level in liquid storage or containment facilities except as a result of recent precipitation or conditions that do not allow removal of material from the facility in accordance with permit conditions.

(b) The permittee shall maintain a margin of safety in liquid storage or containment facilities that levels of manure, process wastewater and other wastes contained in the storage or containment facility may not exceed. Materials shall be removed from the facility in accordance with the permittee's nutrient management plan to ensure that the margin of safety is not exceeded.

(7) CLOSURE. (a) *General.* If the permittee wishes to abandon or discontinue use of structures or systems covered under this subchapter, a closure plan shall be submitted to the department for prior approval.

(b) *Manure storage facilities*. Closure of manure storage facilities shall be completed, at a minimum, according to NRCS Standard 360, dated December 2002. NRCS Standard 360, dated December 2002, is incorporated by reference in s. NR 243.07. Closure of a manure storage facility shall occur when manure has not been added or removed for a period of 24 months, unless the owner or operator can provide information to the department that the structure is designed to store manure for a longer period of time or information that the storage structure will be utilized within a specific period of time.

Note: Copies of NRCS Standard 360, dated December 2002, and documents referenced in this standard may be inspected at the offices of the department, DATCP, NRCS, county land conservation departments and the revisor of statutes, Madison, Wisconsin.

(c) *Monitoring wells.* Groundwater monitoring wells shall be abandoned in accordance with ch. NR 141.

NR 243.18 Combined wastes. If a permittee combines manure or process wastewater with other types of waste not generated by the operation, the combined wastewater shall be stored and land applied in accordance with this subchapter. The permittee shall obtain department approval prior to combining other wastes with manure or process wastewater. The department may apply additional requirements such as the requirements in ch. NR 113, 213, 204 or 214 to the land application of the combined wastes and to the design of structures or systems associated with the combined wastes. Factors that the department shall consider in determining other applicable requirements include the volume and characteristics of the wastes or wastewater combined with the manure, requirements in other rules and any treatment of the combined wastes. The operation's nutrient management plan shall address land application of these wastes.

Note: Other wastes do not include process wastewater from the operation itself. Examples of other wastes include septage or municipal biosolids.

NR 243.19 Inspections, record keeping and reporting. (1) MONITORING AND INSPECTION PROGRAM. In accordance with a WPDES permit, the permittee shall submit a monitoring and inspection program designed to determine compliance with permit conditions that identifies the areas that the permittee will inspect in accordance with this section, the person responsible for conducting the inspections and how inspections will be recorded and submitted to the department. The monitoring and inspection program shall be consistent with the requirements in this subsection.

(a) *Inspections.* Visual inspections shall be completed by the permittee or designee in accordance with the following frequencies:

1. Daily inspection for leakage of all water lines that potentially come into contact with pollutants or drain to storage or containment structures or runoff control systems, including drinking or cooling water lines.

2. Weekly inspections to ensure proper operation of all storm water diversion devices and devices channeling contaminated runoff to storage or containment structures.

3. Weekly inspections of liquid storage and containment structures. For liquid storage and containment facilities, the berms shall be inspected for leakage, seepage, erosion, cracks and corrosion, rodent damage, excessive vegetation and other signs of structural weakness. In addition, the level of material in all liquid storage and containment facilities shall be measured and recorded in feet or inches above or below the margin of safety level.

4. Quarterly inspections of the production area, including outdoor animal pens, barnyards and raw material storage areas. CAFO outdoor vegetated areas shall be inspected quarterly.

5. Periodic inspections and calibration of landspreading equipment to detect leaks and ensure accurate application rates for manure and process wastewater. An initial calibration of spreading equipment shall be followed by additional calibration after any equipment modification that may impact application of manure or process wastewater or after changes in product or manure or process wastewater consistency. Spreading equipment for both liquid and solid manure shall be inspected just prior to the hauling season, and equipment used for spreading liquids shall be inspected at least once per month during months when hauling occurs.

6. Inspections each time manure or process wastewater is surface applied on frozen or snow-covered ground to determine if applied materials have run off the application site. Inspections shall occur during and shortly after application.

(b) *Corrective actions.* The permittee shall take corrective actions as soon as practicable to address any equipment, structure or system malfunction, failure or other problem identified through monitoring or inspections in par. (a).

(c) *Sampling.* Manure, process wastewater and soil on fields used for land application shall be sampled by the permittee in accordance with this chapter and WPDES permit conditions. Manure or process wastewater shall be analyzed on at least an annual basis for nitrogen, phosphorus and percent solids in years when the manure or process wastewater is applied. The department may require more frequent monitoring and monitoring for other parameters as part of a WPDES permit where necessary to provide representative samples of manure and process wastewater. Manure and soil samples shall be analyzed by a laboratory certified under s. ATCP 50.50. Samples of process wastewater that are not mixed with manure shall be analyzed using applicable methods specified in ch. NR 219. The department may specify alternative methods for sampling in the WPDES permit. The permittee shall submit appropriate quality control information for sampling and analysis upon written request of the department.

Note: NRCS Standard 590 requires soil testing once every 4 years.

(2) RECORD KEEPING. The permittee shall retain complete records onsite of all information required as part of this subchapter for a period of at least 5 years from the date the records are created. Results of inspection information, sampling and other information required under this section shall be recorded at the time the information is obtained.

(a) *Record keeping requirements for the production area.* The permittee shall create and retain records documenting the following information for the production area:

1. Current design of any manure storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity.

2. Sampling and inspection information required under sub. (1)(a) and (c).

Note: This subsection requires that specific information must be recorded when samples are taken or inspections are conducted.

3. The date that liquid storage facilities were emptied to the 180-day level indicator.

4. The date, time and estimated volume of any overflow.

5. Any actions taken to correct deficiencies as required under sub. (1)(b). Deficiencies not corrected within 30 days shall be accompanied by an explanation of the factors preventing correction.

6. Mortality management and practices used by the permittee to meet the requirements of s. NR 243.13(8), including the dates and methods of disposal.

(b) *Record keeping requirements for land application activities.* The permittee shall create and retain the following records for activities associated with land application:

1. A copy of the nutrient management plan.

2. Daily logs recorded using form 3200-123A or a department approved equivalent, indicating the following.

a. The dates manure or process wastewater is applied to each field.

b. Fields used.

c. Acres applied.

d. Manure source and waste type.

e. Spreader volume.

f. Number of loads.

g. Whether the soil was dry, wet, saturated, frozen or snow covered at the time of application.

h. Weather conditions at time of application.

i. Whether manure was injected, incorporated or surface applied.

j. Dates of emergency applications in winter.

k. For surface applications on frozen or snow-covered ground, whether any applied manure or process wastewater ran off the application site.

3. A weather log for all dates that manure and process wastewater is spread, including weather 24 hours prior to and following application.

4. Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied.

5. Results from manure, process wastewater and soil sampling.

6. Dates of manure application equipment inspection.

7. Records of the date, recipient name and address, approximate amount and nutrient content of manure or process wastewater distributed to another person in accordance with s. NR 243.142.

(c) *Record keeping for sampling*. For each manure, process wastewater and soil sample taken, the permittee shall record the following information:

1. The date, exact place, method and time of sampling or measurements.

2. The individual or lab that performed the sampling or measurements.

3. The date the analysis was performed.

4. The individual who performed the analysis.

5. The analytical techniques or methods used.

6. The results of the analysis.

(d) *Record keeping for inspections*. For each inspection conducted by the permittee, the permittee shall record the following information:

1. The date and name of persons performing the inspection.

2. An inspection description, including components inspected.

3. Details of what was discovered during the inspection.

4. Recommendations for repair or maintenance.

5. Any corrective actions taken.

(3) REPORTING REQUIREMENTS. (a) *Corrective actions*. If the permittee fails to take corrective action within 30 days of identifying a malfunction, failure or other problem identified under sub. (1), the permittee shall contact the department immediately following the 30-day period and provide an explanation for its failure to take action.

(b) *Quarterly reporting requirements*. The permittee shall summarize the results of the inspections conducted at the production area in a written quarterly report. The reports shall be

maintained onsite until submittal as part of the annual report in par. (c). The report shall include the following information:

1. Identified permit violations including all discharges of manure or process wastewater to surface waters, overflows of liquid manure or process wastewater storage and containment structures, and number of missed inspections.

2. Dates, times and approximate volume of discharges in subd. 1.

3. Corrective actions taken.

4. A summary of the condition of runoff control systems and storage and containment structures.

5. A summary of recorded levels of materials in liquid storage and containment structures, including exceedances of the maximum operating and margin of safety levels.

6. Other information requested by the department in writing or in the permit.

(c) *Annual reporting requirements*. The permittee shall submit written annual reports to the department by the date specified in the WPDES permit for all manure and other process wastewater that is generated. These annual reports shall cover the previous calendar year or cropping year, as specified in the WPDES permit, and shall include the following:

1. The quarterly reports required under par. (b).

2. The number and type of mature and immature animals at the operation and whether the animals are in open confinement or housed under roof.

3. The total amount of material in large CAFO storage or containment facilities, including manure and process wastewater generated by the large CAFO in the previous 12 months, precipitation and runoff diverted to storage or containment structures.

4. Lab analyses of manure and process wastewater land applied in the previous 12 months, and the most recent soil test analysis completed for fields receiving manure or process wastewater in the previous 12 months.

5. An annual spreading report summarizing manure and other process wastewater land application activities using form 3200-123 or a department-approved equivalent, indicating the following for each field receiving manure or process wastewater:

a. Date of application.

b. Information on the fields where manure or process wastewater is applied including field identification, slope and soil test phosphorus levels.

c. Acres applied.

d. Source and nutrient content of applied manure.

e. Current and previous field crops.

f. Nutrient balance indicating crop nutrient need in comparison to nutrients applied and credited from all sources.

g. Whether the soil was dry, wet, saturated, frozen or snow covered.

h. Method and rate of application in tons or gallons per acre.

i. Whether fields meet T.

j. Whether soil tests have been taken within the last 4 years.

k. Number of years of crop phosphorus need applied based on crop rotation.

l. For surface applications on frozen or snow-covered ground, whether any applied manure or process wastewater ran off the application site.

6. Dates on which storage facilities were emptied to the 180-day level indicator.

7. Total amount of manure and process wastewater distributed to another person by the permittee in accordance with s. NR 243.142 in the previous 12 months.

8. Total number of acres for land application covered by the nutrient management plan developed in accordance with s. NR 243.14.

9. Total number of acres actually used by the permittee for land application of manure and process wastewater in the previous 12 months.

10. A statement indicating whether the current version of the permittee's nutrient management plan was developed or approved by a certified nutrient management planner.

11. Results of land application equipment inspections and calibration.

12. Other information requested by the department in writing or in the permit.

Note: Forms 3200-123 and 3200-123A can be obtained at regional offices of the department or the department's Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin 53707.

Subchapter III – Other Animal Feeding Operations

NR 243.21 Purpose. The purpose of this subchapter is to establish procedures, in cooperation with other federal and state agencies and governmental units, for addressing unacceptable practices through the issuance of a notice of discharge or WPDES permit under s. 281.16 or ch. 283, Stats. Animal feeding operations with fewer than 1000 animal units that have unacceptable practices are subject to this subchapter.

NR 243.23 General requirements for animal feeding operations. (1) LIVESTOCK PERFORMANCE STANDARDS AND PROHIBITIONS. (a) Owners and operators of animal feeding operations shall comply with the livestock performance standards and prohibitions in accordance with the requirements s. NR 151.095.

(b) The department may grant a variance to livestock performance standards or accepted management practices consistent with s. NR 151.097. A variance may not be granted to a livestock prohibition or other statutory requirements.

Note: Additional procedures for implementing cropland performance standards are included in ch. NR 151.

Note: Under s. 281.16(3)(e), Stats., an owner or operator may not be required by the state, or a governmental unit through an ordinance or regulation, to bring existing livestock facilities into compliance with the livestock performance standards or prohibitions, technical standards or conservation practices unless cost sharing is available.

NR 243.24 Department discharge determination and NODs. Unless based on information provided as part of a WPDES permit application submitted pursuant to s. NR 243.26(1), no determination may be made by the department that an unacceptable practice exists at an operation until there has been an onsite investigation by the department or a federal or state agency or governmental unit.

(1) CATEGORIES OF UNACCEPTABLE PRACTICES. The department shall identify the categories of discharge associated with unacceptable practices pursuant to the following criteria:

(a) *Category I.* A category I unacceptable practice is a practice or facility at an animal feeding operation that causes a point source discharge of pollutants to navigable waters by either of following means:

1. Pollutants are discharged into navigable waters through a man-made ditch, flushing system or other similar man-made device.

2. Pollutants are discharged into navigable waters that originate outside of the operation and pass over, across or through the operation or otherwise come into direct contact with the animals confined at the operation.

(b) *Category II.* A category II unacceptable practice is a practice or facility at an animal feeding operation that causes a discharge of pollutants to waters of the state that is the result of an owner's or operator's failure to comply with a livestock performance standard or prohibition in ss. NR

151.05 to 151.08. For Category II discharges, waters of the state has the meaning specified under s. 281.01(18), Stats.

(c) *Category III.* A category III unacceptable practice is a practice or facility at an animal feeding operation that caused a discharge of pollutants to waters of the state and that is not described in par. (a) or (b).

(2) COORDINATION WITH GOVERNMENTAL UNITS. Unless an unacceptable practice is an imminent threat to public health or fish and aquatic life, the department shall notify the appropriate governmental unit prior to taking any of the following actions:

(a) Contacting an owner or operator of an animal feeding operation under the procedures in this subchapter to investigate a discharge from an unacceptable practice.

(b) Issuing an NOD for a category II unacceptable practice.

(c) Taking enforcement action under s. 281.98, Stats., against an owner or operator of an animal feeding operation for failing to comply with a livestock performance standard or prohibition.

(3) DEPARTMENT ACTION. If the department determines that an unacceptable practice exists at an operation based on its own onsite investigation, an investigation conducted by a federal or state agency or governmental unit, or information provided as part of WPDES permit application, the department may take any of the following actions:

(a) *For all unacceptable practices.* 1. The department may coordinate with a designated governmental unit to address the unacceptable practice and provide assistance to the owner or operator. This contact shall be made as soon as possible after the determination that an unacceptable practice exists at an operation to maximize opportunities for the governmental unit to provide assistance to the owner or operator.

2. The department may issue a notice of intent to issue an NOD.

(b) *Category I unacceptable practices*. For category I unacceptable practices, the department may take any of the following actions:

1. Issue an NOD to the owner or operator of the animal feeding operation to address the unacceptable practices.

2. Send the owner or operator a permit application if the owner or operator has not filed a WPDES permit application pursuant to s. NR 243.26.

3. Designate the operation as a CAFO under s. NR 243.26(2).

4. Take direct enforcement action.

Note: In general, the department considers factors such as the degree of harm to a waterbody and the level of mismanagement or negligence by an owner or operator when deciding whether to take direct enforcement action.

(c) *Category II unacceptable practices*. For category II unacceptable practices, the department may take any of the following actions:

1. Issue an NOD if requested by a governmental unit or if a governmental unit is not addressing a facility's noncompliance with livestock performance standards or prohibitions in a manner consistent with the procedures established in ch. NR 151.

2. Follow the procedures outlined in s. NR 151.095.

3. Designate the operation as a medium or small CAFO under s. NR 243.26(2).

(d) *Category III unacceptable practices*. For category III unacceptable practices, the department may take any of the following actions:

1. Issue an NOD to the owner or operator.

2. Take direct enforcement action.

3. Designate the operation as a medium or small CAFO under s. NR 243.26(2).

Note: In most cases, the department will rely on governmental units to fully implement the livestock performance standards and prohibitions and address impacts to water quality from category II unacceptable practices. The department intends to issue NODs in accordance with this section in cases where a governmental unit has requested assistance in implementing and enforcing the performance standards or prohibitions or in cases where a governmental unit has failed to appropriately address unacceptable practices at animal feeding operations in a timely manner. The department recognizes that coordination between governmental units, the department of agriculture, trade and consumer protection and other state agencies is needed to achieve statewide compliance with the performance standards and prohibitions. Accordingly, the department has worked with counties, the department of agriculture, trade and consumer protection and other interested partners to develop a detailed intergovernmental strategy for achieving compliance with the performance standards and prohibitions that recognizes the procedures in this subchapter, state basin plans and the priorities established in land and water conservation plans.

(4) NOTICE OF DISCHARGE. (a) If the department issues an NOD to an owner or operator of an animal feeding operation, it shall be sent certified mail, return receipt requested or personal delivery.

(b) The department shall include all of the following information in an NOD:

1. A summary of the results of the onsite investigation used to determine that unacceptable practices exist at an operation. The summary shall include a determination of the category of the unacceptable practice that exists at the operation. The department shall provide a copy of the summary to the animal feeding operation and appropriate governmental unit.

2. One or more suggested corrective measures for the unacceptable practice identified in the summary report. The department may amend an NOD at any time to reflect changes to suggested corrective measures based on further evaluation and planning associated with addressing the unacceptable practice.

3. A list of known governmental or private services that may be available to provide technical or financial assistance.

4. For category II unacceptable practices, the NOD shall contain determinations consistent with s. NR 151.095, except that the length of the compliance period shall be determined in accordance with subd. 5. Determinations required under s. NR 151.095 may be included as part of the NOD or as amendments to the NOD.

Note: Section NR 151.095 contains the criteria and establishes the procedures for determining when cost sharing is required for eligible costs associated with corrective measures and when cost sharing is considered to have been made available. Cost sharing is not required for new facilities and for practices that do not involve eligible costs, such as moving a manure pile. Cost sharing for eligible costs may be available under ch. NR 120 or 153.

5. A reasonable compliance period for implementing necessary corrective measures shall be specified in the NOD. The compliance period identified in the NOD shall be determined by the department in accordance with the following:

a. The length of the compliance period shall be from 60 days to 2 years unless otherwise provided for in this paragraph.

b. The length of the compliance period may be less than 60 days if the site is an imminent threat to public health or fish and aquatic life.

c. The compliance period may not be more than 2 years unless an alternative compliance period has been mutually agreed upon by the department and the owner or operator of the animal feeding operation.

d. For existing practices or facilities where corrective measures require cost sharing in accordance with s. NR 151.095 and where cost sharing has not previously been made available, the compliance period specified in an NOD shall begin on the date that cost share dollars are available pursuant to s. NR 151.095(5)(d).

Note: Cost-share dollars may be offered as part of an NOD or may be included in an amendment to an NOD.

e. For all other practices or facilities, the compliance period specified in the NOD shall begin on the date of the NOD, regardless of the availability of cost sharing.

6. An explanation of the possible consequences if the owner or operator fails to comply with the provisions of the notice, including enforcement or loss of cost sharing, or both.

(c) The department may request that proposed corrective measures be submitted to the department for review prior to implementing the corrective measures.

(d) The department may require that accepted management practices be superseded by additional design requirements or practices if they are necessary for water quality protection.

(e) The department may require that the owner or operator of the animal feeding operation, or a designee, notify the department as to the status of implementing the corrective measures prior to the end of the compliance period.

NR 243.25 NOD enforcement. (1) CATEGORIES I AND III. (a) Owners or operators or animal feeding operations that receive an NOD for a category I or III unacceptable practice shall implement corrective measures within the compliance period specified, regardless of the availability of cost sharing. The owner or operator may seek cost sharing to implement corrective measures within the specified compliance period, but if cost sharing is not available, the owner or operator shall install corrective measures to abate or eliminate the discharge without cost sharing or otherwise apply for a WPDES permit.

(b) If the owner or operator does not implement the corrective measures within the specified time frame to address category I or III unacceptable practices, the department may issue a specific WPDES permit or grant general permit coverage or the department may pursue enforcement action under ch. 283, Stats.

(2) CATEGORY II. For operations issued an NOD for a category II unacceptable practice, if the owner or operator of the animal feeding operation does not implement corrective measures within the compliance period specified in the NOD, and cost sharing has been made available for existing facilities or practices or if cost sharing is not required under s. NR 151.095, the department may take enforcement action pursuant to s. 281.98, Stats., require the submittal of a WPDES permit application or take other appropriate actions against the owner or operator.

Note: The procedures specified in this subchapter for category II unacceptable practices are limited to actions taken by the department under s. 281.98, Stats., for noncompliance with a livestock

performance standard or prohibition. Pursuant to other statutory authority, the department may take direct enforcement action without cost sharing against a livestock producer for willful or intentional acts or other actions by a producer that pose an imminent or immediate threat to human health or the environment.

NR 243.26 WPDES permits for medium and small CAFOs. (1) OPERATIONS DEFINED AS A MEDIUM CAFO. Any owner or operator of an animal feeding operation with 300 to 999 animal units shall submit a complete application for a WPDES permit to the department before a category I discharge to navigable waters occurs. An owner or operator of an animal feeding operation that has 300 to 999 animal units may not have a Category I discharge to navigable waters under s. NR 243.24(1)(a) unless the discharge is covered by and in compliance with a WPDES permit. In the event an owner or operator of an animal feeding operation has a Category I discharge to navigable waters and that operation is not covered by a WPDES permit at the time of the discharge, the owner or operator shall immediately contact the department and shall immediately apply for a WPDES permit.

(2) OPERATIONS DESIGNATED AS MEDIUM OR SMALL CAFOS. (a) Subject to par. (c), for animal feeding operations not already defined as a CAFO under sub. (1), the department may designate an animal feeding operation with 999 animal units or less as a CAFO if all of the following occur:

1. The department conducts an onsite investigation of the operation.

2. The department determines one of the following:

a. The operation is a significant contributor of pollutants to navigable waters and the department considers the factors in par. (b) when making this determination; or

b. The operation has caused the fecal contamination of water in a well constructed in accordance with ch. NR 811 or 812.

3. For discharges of pollutants from land applied manure or process wastewater to navigable waters by an animal feeding operation with 300 to 999 animal units, the department determines the discharge was not an agricultural storm water discharge.

4. The department provides written notification to the owner or operator of the designation.

Note: Consistent with past regulatory practices, the department intends to continue to work cooperatively with animal feeding operations to address discharges to waters of the state to the maximum extent practicable in order to make designation of an operation as a CAFO unnecessary. This approach includes using voluntary programs or the issuance of an NOD, which typically provides

an opportunity to obtain cost-share and technical assistance, to aid an operation to implement corrective measures.

Note: Written notification by the department may be included as part of a Category I, II or III NOD or a separate written notice may be sent to the owner or operator.

Note: For animal feeding operations with less than 300 animal units, a significant discharge of pollutants to navigable waters from land application activities is not a basis for designating an operation as a CAFO and requiring a WPDES permit-see par. (c). For animal feeding operations with 300-999 animal units, a significant discharge of pollutants to navigable waters from either the production area or land application areas is a basis for CAFO designation and WPDES permit coverage.

(b) The department shall consider all of the following factors when determining whether an operation is a significant contributor of pollutants to navigable waters under par. (a):

1. The size of the animal feeding operation and the amount of manure or process wastewater reaching navigable waters.

2. The location of the operation's production and land application areas relative to the navigable waters.

3. The means of conveyance of the manure or process wastewater into navigable waters.

4. The slope, vegetation, rainfall and other factors affecting the likelihood or frequency of discharges of manure or process wastewater into navigable waters.

5. Other factors relevant to water quality impacts.

(c) If the animal feeding operation has less than 300 animal units, the department may not designate the operation as a CAFO based on the discharge criteria in par. (a)2.a. unless the operation had a Category I discharge to navigable waters under s. NR 243.24(1)(a) that the department determines contributed a significant amount of pollutants to navigable waters.

(d) If an animal feeding operation is designated as a CAFO under par. (a), the owner or operator of the operation shall take one of the following actions within 90 days of written notification by the department of the designation:

1. In accordance with sub. (3), submit a completed WPDES permit application for an individual permit or for general permit coverage to the department. If a general permit is not available from the department, the permittee shall apply for an individual permit.

2. Demonstrate to the complete satisfaction of the department that the owner or operator has taken actions to permanently eliminate or significantly reduce the discharge that was the basis of the designation.

(e) If the owner or operator fails to take the actions required in par. (d) within 90 days of notification, the department may take enforcement action.

(3) APPLICATIONS. Applications shall, at a minimum, be submitted on forms 3400-25 and 3400-25A. The department may require additional information as part of the permit application consistent with the requirements of subch. II.

Note: Applications can be obtained at regional offices of the department or the department's Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin 53707.

(4) WPDES TERMS AND CONDITIONS. (a) WPDES permits issued under this subchapter shall contain requirements designed to implement corrective measures to address unacceptable practices, to protect groundwater and surface waters, and to prevent impairments to wetland functional values. At a minimum, permits shall contain requirements that a permittee do all of the following:

1. Comply with livestock performance standards and prohibitions, regardless of the availability of cost sharing.

2. Address manure, process wastewater and contaminated runoff from the production area in a manner that is consistent with accepted management practices and that treats or contains all manure, process wastewater and contaminated runoff for storm events up to and including a 25-year, 24-hour storm event.

Note: In determining accepted management practices for small and medium CAFOs, the department shall consider the factors contained in 40 CFR § 125.3(d).

3. Control all discharges from the production area in a manner that does not cause exceedances of groundwater or surface water quality standards or impair wetland functional values.

4. Develop and implement a nutrient management plan in accordance with s. NR 243.14 for the land application of manure and process wastewater.

5. Comply with the requirements in ss. NR 243.13(5)(b) and (6) to (8) and 243.142(5).

6. Conduct periodic inspections of the production area and land application equipment at a frequency specified in the WPDES permit.

7. Conduct manure, process wastewater and soil sampling in accordance with WPDES permit conditions.

8. Maintains and submit reports to the department in accordance with WPDES permit conditions.

Note: The WPDES permit requirements outlined in this subsection for small and medium CAFOs, including the requirement to develop and implement a nutrient management plan in accordance with s. NR 243.14, are only mandatory for those small and medium operations that have

been issued a WPDES permit. For small and medium AFOs that have not been issued a WPDES permit, nutrient management requirements contained in ATCP 50 apply.

(b) All submitted plans and specifications or evaluations of facilities or structures required under a WPDES permit shall be done in accordance with ss. NR 243.15 and 243.16 unless the department includes alternative requirements in the WPDES permit.

Note: Under par. (b), all permitted medium and small CAFOs are required to install 180 days of storage for liquid manure.

(c) The permittee shall comply with the operation and maintenance requirements in s. NR 243.17, unless the department includes alternative requirements in the WPDES permit.

Note: Pursuant to s. 283.31, Stats., and federal regulations, a point source discharge by a medium size CAFO is prohibited unless the discharge is covered by, and in compliance with, a WPDES permit.

Note: Pursuant to ch. NR 153, operations covered by a WPDES permit are no longer eligible for cost sharing under s. 281.65, Stats.

(5) GENERAL PERMITS. The department may issue a general permit to cover a category of medium or small CAFOs.

(6) REISSUANCE OR TERMINATION OF WPDES COVERAGE. If a medium or small CAFO is covered by an individual or general WPDES permit, the owner or operator shall maintain permit coverage and shall reapply for continued coverage at least 180 days prior to the expiration of the WPDES permit unless:

(a) The permittee has ceased operation or is no longer a CAFO.

(b) The permittee has demonstrated to the satisfaction of the department that there is no remaining potential for a discharge to navigable waters of manure and process wastewater that was generated while the operation was a CAFO, or there is no remaining potential to cause well contaminations.

Subchapter IV – CAFO Enforcement

NR 243.31 Enforcement. (1) If the department finds that the owner or operator of a CAFO violated a term or condition of its WPDES permit, the department may, following notice to the permittee, modify, suspend or revoke the permit, in whole or in part, under s. 283.52(2), Stats.

(2) If the department finds that the owner or operator of a CAFO is violating a term or condition of its WPDES permit, any requirement in this chapter or ch. 283, Stats., or that the owner

or operator of a CAFO is discharging manure or process wastewater pollutants to waters of the state without a WPDES permit, the department may refer the matter to the department of justice for enforcement, pursuant to s. 283.89, Stats. In an enforcement action, the department may seek temporary or permanent injunctive relief and may seek the civil and criminal penalties established in s. 283.91, Stats. The department may recover the costs of investigating the violation and the expenses of prosecution, including attorneys fees under s. 283.91(5), Stats., and the costs of removing, terminating or remedying the adverse effects on the water environment under s. 283.87, Stats.

SECTION 2. INITIAL APPLICABILITY. (1) Except as provided in subs. (2) and (3), the requirements in ch. NR 243 apply to owners and operators of large CAFOS or proposed large CAFOs on the effective date of the rule.

(2) If an owner or operator of a large CAFO holds a WPDES permit on the effective date of the rule, the requirements in s. NR 243.13 apply to the operation upon a modification or reissuance to the permit that incorporates the requirements.

(3) If an owner or operator of a large CAFO holds a WPDES permit on the effective date of the rule, the requirements in ss. NR 243.14, 243.141, 243.17 and 243.19 apply when a permit modification or reissuance incorporates the requirements, unless the existing WPDES permit requires compliance with the revised land application and monitoring requirements established in this chapter upon department notification of rule changes and submittal of a manure management plan amendment in which case the requirements apply upon written department notification to the permittee of the rule changes.

Note: An operation permitted as of the effective date of the rule may already have to comply with some of these requirements in this chapter such as inspection and record keeping requirements or the production area standards because the requirements are already included as a term or condition of the WPDES permit.

(4) For medium and small CAFOs and animal feeding operations, the requirements in ch. NR 243 apply on the effective date of the rule.

SECTION 3. EFFECTIVE DATE: This rule shall take effect on the first day of the third month commencing after the date of publication of the rule as provided in s. 227.22(2)(e), Stats.

SECTION 4. BOARD ADOPTION. The rule was approved and adopted by the State of Wisconsin Natural Resources Board on May 24, 2006 and January 24, 2007.

Dated at Madison, Wisconsin

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STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Scott Hassett, Secretary

(SEAL)