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Details:

(FORM UPDATED: 07/12/2010)

WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2005-06

(session year)

Assembly

(Assembly, Senate or Joint)

Committee on ... Agriculture (AC-Ag)

COMMITTEE NOTICES ...

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**
- Record of Comm. Proceedings ... **RCP**

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt**
- Clearinghouse Rules ... **CRule**
- Hearing Records ... bills and resolutions
 - (**ab** = Assembly Bill) (**ar** = Assembly Resolution)
 - (**sb** = Senate Bill) (**sr** = Senate Resolution)
 - (**ajr** = Assembly Joint Resolution)
 - (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

REPORT TO LEGISLATURE

NR 243, Wis. Adm. Code
Animal feeding operations

Board Order No. WT-21-05
Clearinghouse Rule No. 05-075

Basis and Purpose of the Proposed Rule

On April 14, 2003, US EPA finalized revisions to federal regulations for Concentrated Animal Feeding Operations (CAFO). Under state law, and as part of the Department's delegation agreement with the U.S. EPA to implement the National Pollutant Discharge Elimination System (NPDES) permit program under the Wisconsin Pollutant Discharge Elimination System (WPDES) program, the Department is required to update its regulations to reflect the federal revisions. Accordingly, the revisions to ch. NR 243 implement the recent changes to federal CAFO regulations, and the proposed rules also include other changes to the WPDES permit program for CAFOs to protect water quality and improve program consistency.

Issues addressed by this rule

The regulations contained in ch. NR 243 are intended to address water quality impacts from animal feeding operations. Chapter NR 243 includes requirements for large, medium and small CAFOs under the WPDES permit program. Some sections of ch. NR 243 address implementation of the performance standards and prohibitions contained in ch. NR 151, but the Department is not proposing any changes to these sections. Since water resources in Wisconsin protected by the WPDES permit program include navigable lakes, streams, other surface waters, groundwater and wetlands, ch. NR 243 includes requirements to protect all of these types of water resources. However, ch. NR 243 does not address non-water quality related issues such as air pollution, odor or noise. Since ch. NR 243 is an existing administrative code, much of the framework for the WPDES permit program for CAFOs has been in place since the mid-1980's and already includes some of the revised federal rules.

The key issues associated with the proposed revisions to ch. NR 243 relate to:

- The duty to apply for a WPDES permit: All large CAFOs with 1000 animal units or more that store manure or process wastewater in structures that are located at or below grade, or that land apply manure are required to apply for WPDES permits.
- Calculating the size of an operation: The revisions include two methods for calculating the number of animal units at an operation (combined and individual animal unit calculation).
- Defining "agricultural storm water" discharges.
- Issuing general permits to CAFOs.
- Nutrient management planning requirements: The revisions outline requirements for phosphorus-based plans, restrictions on CAFO manure applied in the winter and restrictions on CAFO manure and process wastewater applications near surface waters.
- Groundwater protection: Best management practices included in the revisions are intended to better address potential groundwater contamination from applied CAFO manure and process wastewater.
- Manure stacking: The rule includes allowances for in-field stacking ("headland stacking") of solid manure.
- Distributed manure: The revisions outline CAFO responsibility for manure that is distributed or given away.
- Manure storage: The revisions require 180-day storage for liquid manure for permitted CAFOs (delayed compliance date of January 1, 2010, for existing operations).

Revisions at the federal level regarding how EPA calculates the size of operations that need to apply for permits, as well as a recent federal court decision (*Waterkeeper Alliance et al. v. EPA*, 399 F. 3d 486 (2nd Cir. 2005)) that affected a few of the 2003 federal rule revisions, have raised questions regarding how the Department implements the WPDES permit program for CAFOs and whether the Department should proceed with this rule package. Also, issues have been raised by producer groups regarding the parts of the proposed revisions that are more stringent than the federal regulations. The Department has outlined areas where the revisions are more stringent than federal regulations in Section 6 of the rule analysis.

Despite the decision in the *Waterkeeper* case, the Department believes the rule package should proceed forward because the *Waterkeeper* decision affects only a few parts of the revised EPA regulations. In addition, the few sections that were remanded to EPA won't have a significant influence on Wisconsin's program because under ch. 283, Stats., Wisconsin's WPDES permit program has a broader scope than the federal program. Also, Wisconsin and Illinois are the only states in EPA Region V that have not completed their efforts to include the new federal requirements in their delegated NPDES permit program.

Effect on existing policy

The proposal's primary impact on existing policy is to more clearly outline permit application requirements and requirements for manure storage and nutrient management for CAFOs in order to reflect federal CAFO rule revisions and to reflect state authority to protect groundwater.

The proposed revisions to ch. NR 243 make only slight changes to the current code's duty to apply requirements for operations with 1,000 animal units or greater. The duty to apply for WPDES permits is no longer based solely on the size of operations, but also on the fact that large operations that land apply or store manure will have actual discharges to groundwater and surface waters that require permit coverage. Therefore, any large CAFO that will store manure or process wastewater in a structure that is at or below grade, or that land applies manure or process wastewater will have to apply for a WPDES permit. In addition, under the existing regulations, the Department can require WPDES permit coverage for medium and small CAFOs based on certain discharges to navigable waters. The proposed rule retains this federally-based provision, but also extends the ability of the Department to require permit coverage for medium and small operations if they have discharges that cause contamination of wells. While the proposed code maintains the combined animal unit calculation in the current code, it adds the required federal "individual" animal unit calculation using more restrictive federal animal unit numbers for certain animal types. The federal "individual" animal unit calculation will result in an additional 10-15 existing livestock operations needing to apply for WPDES permits for the first time. The proposed revisions also allow operations that become CAFOs as a result of purchasing another operation up to 90 days to apply for WPDES permits.

The existing requirements in ch. NR 243 prohibit runoff of surface applied manure from the application site at any time. However, the revised federal regulations created a definition for the term "agricultural storm water discharges." In general, "agricultural storm water discharges" are discharges to surface waters from land application activities that occur after an operation has complied with its approved nutrient management plan and land application restrictions in the WPDES permit. These "agricultural stormwater discharges" are not regulated by the WPDES permit. Therefore, given the definition of "agricultural storm water", and other changes to the land application requirements, the proposed rule revisions now allow limited discharges of land applied manure and process wastewater to navigable waters provided certain conditions are met.

The current version of ch. NR 243 also allows application on frozen or snow-covered ground for all manure (solid and liquid) and does not require liquid manure storage. The proposed code includes more restrictive manure handling requirements, including: (1) a prohibition of surface applications of solid manure on frozen or snow-covered ground during February and March, (2) a prohibition of surface applications of liquid manure whenever the ground is frozen or snow-covered, and (3) a requirement that CAFOs construct 180 days of storage for liquid manure. These changes are being made in response to federal requirements that CAFOs address the timing of manure applications in order to prevent nutrient delivery to navigable waters. These restrictions are also a response to previous runoff events in the state

from manure applications on frozen or snow-covered ground that have impacted surface waters and groundwater (fish kills, runoff events, private well contaminations). The revisions to ch. NR 243 also require that CAFOs implement phosphorus-based nutrient management statewide. The current version of ch. NR 243 only requires phosphorus-based nutrient management in targeted areas of the state.

The proposed code also includes new federal inspection and recordkeeping requirements and specifies monitoring and reporting requirements for land application activities and nutrient management. In other areas, the rule revisions attempt to ensure statewide program consistency by codifying certain requirements that were previously determined on a case-by-case basis within each permit such as allowances for stacking of manure during winter months. In addition, the proposed revisions provide additional allowances for CAFOs to transfer responsibility for manure and process wastewater to other parties provided certain conditions are met.

Summary of Public Comments

A total of five hearings were held on ch. NR 243 at the following locations in late summer of 2005; Richland Center (August 15), Jefferson (August 17), Eau Claire (August 18), Wausau (August 22) and Green Bay (August 25). Public participation at the hearings is summarized in the table below.

With the exception of the Green Bay and Eau Claire hearings, most of the hearings appeared to be more heavily attended by livestock producers and producer groups who had come to learn about the rule or express concerns about the rule. The Eau Claire meeting was lightly attended and appeared equally split between people supporting the rule and those opposing or expressing concerns about the rule. At the Green Bay hearing, a large number of individual non-farm citizens had come to learn about the rule or to express general support for the rule. Particularly noteworthy was the testimony by a farm family speaking in general support of the rule whose well had been contaminated by manure and whose young daughter had become sick due to E-coli. Comments at the hearings generally reflected the written comments received during the public comment period which are discussed below.

| Hearing Location | Total attendance | Appearance slips | Oral Testimony | Support | Support w. Changes | Oppose | As Interest May Appear |
|------------------|------------------|------------------|----------------|-----------|--------------------|-----------|------------------------|
| Richland Center | 30 | 24 | 8 | 2 | 0 | 3 | 4 |
| Jefferson | 20 | 19 | 7 | 2 | 1 | 5 | 1 |
| Eau Claire | 14 | 12 | 6 | 4 | 1 | 3 | 2 |
| Wausau | 34 | 29 | 6 | 3 | 0 | 12 | 12 |
| Green Bay | 75 | 33 | 15 | 16 | 1 | 3 | 2 |
| Totals | 173 | 117 | 42 | 27 | 3 | 26 | 21 |

Based on input from producers and producer groups, the Department extended the public comment from September 9, 2005 to October 14, 2005. The Department has made a number of public contacts after the hearings including eight additional information sessions (an afternoon and evening session at each listed site) in Menomonee (September 20), Abbotsford (September 21), Madison (September 28) and Appleton (September 29). The Department has also given a number of presentations to various groups on the proposed revisions including; CNMP Training (Professional Dairy Producers of Wisconsin (PDPW) (November 3); Wisconsin Fertilizer, Aglime and Pest Management Conference (January 18); Soil and Water Conservation Society (January 26), Professional Nutrient Applicators (February 1); Farm Management Update for Ag Professionals (March 17); PDPW (March 30); Wisconsin Ag Coalition (April 10); Environmental advocacy and conservation groups (April 17). The Department has also made numerous informal contacts with other state and federal agencies (e.g., DATCP, US EPA Region V, NRCS) regarding the proposed rule.

In addition to the comments received at hearings, the Department received 374 comment letters with a total of approximately 1200 individual comments regarding the rule.

The Department received many comments from individual producers, permitted and unpermitted, producer groups (e.g., Dairy Business Association, Midwest Food Processors Association, Wisconsin Federation of Cooperatives, Wisconsin Pork Association) and agronomists who work with livestock operations. These commenters generally spoke in opposition to the proposed rule conditions, particularly as related to duty to apply requirements, the continued use of the combined animal unit calculation, liquid storage requirements, restrictions on frozen or snow-covered ground, responsibility for manure distributed to other producers or individuals, and monitoring and inspection requirements.

Many producers believed that the rule requirements are too costly and are overly prescriptive and onerous and would impede growth of the livestock sector in Wisconsin. Many believed that the revisions exceed the federal regulations and are not consistent with other state of Wisconsin rules and standards (e.g., Livestock Siting Rules-ATCP 51, ATCP 50 and NRCS Standard 590), particularly related to nutrient management requirements.

The fact that all large CAFOs (1,000 animal units or greater) would be required to obtain permits based on discharges to groundwater and surface water from land application activities has been viewed unfavorably by agricultural groups. Some did not agree that all land application results in discharges to groundwater. They were concerned the Department would use this reasoning to issue permits to operations of all sizes that land apply manure. The continued use of the combined animal unit calculation generated significant concern and focused on the fact that the combined animal unit calculation was not required by federal CAFO rules. Some agricultural groups asserted that the combined animal unit calculation would result in over 300 new operations needing to get permits. Restrictions on manure applications of frozen or snow-covered ground were viewed as inconsistent with other state rules. In addition, comments indicated that restricting applications on frozen or snow-covered ground, especially in February and March, could potentially result in more runoff during the spring due to compaction issues and the sheer volume of manure that would need to be applied before crops were planted during spring rains. There were some producers who believed that there needed to be more restrictions for liquid manure than solid manure. Many opposing comments regarding restrictions on land application activities near surface waters and direct conduits to navigable waters (SWQMA restrictions) were focused on the assumed inclusion of subsurface drainage system (tile lines) in the definition of conduit to navigable waters. Comments expressed concern that these requirements would take land out of production.

These groups also objected to the monitoring and reporting requirements in the code, citing the time and expense that would be associated with the requirements. The Department received limited comment in opposition to the concept of phosphorus-based nutrient management and mortality management. However, comments opposed phosphorus-based restrictions in ch. NR 243 that went beyond NRCS Standard 590 and opposed the reporting requirements associated with mortality management. Agricultural representatives generally spoke in favor of the use of general permits for CAFOs and the Department "Green Tier" program. A limited number of producers spoke in favor of some of the other rule requirements, especially the need for liquid manure storage.

The Department also received many comments from individual citizens and environmental advocacy and conservation groups (e.g., Wisconsin Trout Unlimited, Environmental Defense, Wisconsin Wildlife Federation, River Alliance of Wisconsin, Midwest Environmental Advocates representing over 15 advocacy groups and individuals). Approximately 260 comments consisted of concerns about impacts to water quality from improper manure handling, general support for rule requirements for winter spreading restrictions and liquid manure storage, and concern or opposition to both general permits and allowances to stack manure outside of confined storage facilities. The Department also received submittals from 25 members of the Wisconsin League of Conservation Voters expressing general support for the rule based on concerns about protecting Wisconsin's water resources. Comments generally supported the duty for all large CAFOs to apply for WPDES permits, the combined animal unit calculation, the additional groundwater protections included in the code, winter spreading restrictions for solid and liquid manure, liquid manure storage, SWQMA restrictions, and phosphorus-based nutrient management. Reasons for support centered around ensuring that waters of the state are protected. Many referenced historical

manure runoff events including the greater than 50 events documented in 2004-2005). Comments also referenced the state authority to protect groundwater.

While many commenters expressed general support, some wanted the rule strengthened. These particular comments proposed: (1) eliminating the allowance for a "no potential to discharge" determination, (2) requiring liquid manure storage by 2008 or earlier rather than 2010, (3) placing additional restrictions on land applications of manure and process wastewater related to phosphorus, (4) eliminating the potential use of General Permits for CAFOs and (5) eliminating the allowance for stacking of manure. Some expressed concern about the complexity of portions of the rule (e.g., SWQMA restrictions) and the Department's ability to enforce the rule in a preventative rather than reactive mode. In addition, a comment was received that recommended that the Department should more aggressively permit small and medium operations (those with fewer than 1,000 animal units).

A number of comments and legal arguments were raised by representatives of both agricultural and environmental advocacy groups referencing a recent court decision on the federal CAFO rule (the *Waterkeeper* decision) as justification for their support or opposition for portions of the rule.

The Department received comments from other government agencies including U.S. EPA, the Department of Agriculture, Trade and Consumer Protection (DATCP), the Natural Resources Conservation Service (NRCS), Department of Commerce (Small Business Regulatory Review Board (SBRRB)), UW-Discovery Farms and a small number of county Land Conservation Departments.

U.S. EPA primarily supported the rule but commented on areas it did not believe that the rule was protective enough (e.g., allowances to spread manure and process wastewater on fields high in phosphorus, winter spreading restrictions, addressing forecasted rain). U.S. EPA also provided a number of technical and clarifying comments as did NRCS. DATCP primarily commented in general support of the rule except in areas that it believed the revisions were inconsistent with other state rules and programs. DATCP also identified areas where it believed that the rule language was complex and confusing. UW-Discovery Farms discussed the need to work with and educate producers to solve runoff problems, identified areas that need more study (tile line discharges), and asked clarifying questions regarding rule requirements. Counties that commented wanted more restrictive requirements for manure storage and groundwater protection.

The SBRRB submitted a number of questions regarding the Department's initial regulatory flexibility analysis. The Department has responded to these comments as part of the "Response to Comment" and will be sending those responses to the SBRRB.

Modifications Made

In response to comments, a number of changes were made to the version of ch. NR 243 that was public noticed on August 1, 2005. A more detailed summary of comments and associated responses are included in the attached "Response to Comments." Some of the more significant changes that have been made in response to comments include:

- Revising the definition of "agricultural storm water" to more clearly reflect conditions when discharges of manure and process wastewater to navigable waters are allowed
- Revising the combined animal unit calculation to reflect the calculation in current ch. NR 243 and adding an "individual" animal unit calculation (the public noticed code would have used more restrictive animal units numbers from the federal rule in the mixed animal unit calculation, and according to the Dairy Business Association, would have required permits for many more operations)
- For large CAFOs, specifying that discharges to groundwater and surface waters from land application or storage requires coverage under WPDES permits (associated with this duty to apply requirement, the "no potential to discharge determination" has also been removed)
- Extending the effective date of solid manure winter spreading restrictions and storage requirements from January 1, 2007 to January 1, 2008 for existing operations.
- Restricting surface applications of manure based on forecasted precipitation

- Directly referencing the Wisconsin Phosphorus Index (PI) as a method of addressing phosphorus delivery to water resources and placing additional restrictions on fields with high soil phosphorus levels
- Requiring an assessment of the risk of acute winter losses (using the PI) as a basis for allowing surface applications of solid manure, process wastewater and emergency applications of liquid manure on frozen or snow-covered ground
- Allowing manure stacked in the winter to remain in place for up to eight months (the public noticed code would have required stacks be removed by June 1st)
- Allowing case-by-case approvals of surface applications of manure during some winter months for operations that stack rather than store manure with more than 32% solids
- Allowing the Department to designate small or medium operations that cause fecal contamination of wells as CAFOs and require coverage of such operations under WPDES permits
- Allowing an animal feeding operation that becomes a CAFO as a result of purchasing another operation up to 90 days to apply for a WPDES permit

At its meeting on May 24, 2006, the Natural Resources Board also adopted 3 clarifying, nonsubstantive modifications:

- Per federal requirements, modify portions of Table 2B (NR 243.05 – Individual Animal Unit Calculations Equivalencies) by combining heifers into one animal type (400-1200 lbs.), combining all beef cattle into one animal type, and removing sows and boars as separate animal types.
- Modify incorporations by reference (NR 243.07) by (1) specifying inclusion of chs. 9 and 10 of the NRCS Agricultural Waste Management Field Handbook, (2) correcting publication dates for NRCS Standard 342 and NRCS Construction Specification 4, (3) deleting references to the "Manual for Steel Construction", the "National Design Specification for Wood Construction", ASTM Standard D-5084-03, and the Wisconsin Barnyard Runoff Model and (4) replacing the reference to the NRCS National Handbook of Conservation with NRCS Standard 430DD-1.
- Amend s. NR 243.14(2)(b)2. and 4. to change the words "leave the field via subsurface drains" to "discharge to waters of the state through subsurface drains" and add notes stating that department may require actions to clean up the deposited manure or process wastewater if the manure or process wastewater leaves the site through a subsurface drain and is deposited on another person's property or is deposited in an area that may reach waters of the state.

Appearances at the Public Hearing

August 15, 2005 – Richland Center

In support:

George Meyer, Wisconsin Wildlife Federation, 201 Randolph Drive, Madison, WI 53717
Jim Goodman, E103 County Highway Q, Wonewoc, WI 53968

In opposition:

Mike Wehler, Wis. Pork Producers Association, S9461 Highway C, Plain, WI 53577
F. Wyttenbach, E10941 River Road, Sauk City, WI 53583
R. F. Hauser, 31877 Dog Hollow Road, Richland Center, WI 53581
Ralph Levzow, N5074 Highway 22, Rio, WI 53960
Donald Leix, Leix Farms, Inc., 3041 Highway XX, Montfort, WI 53569
Donald F. Goldade, Karl Hausner Farms, E8985 County B, Sauk City, WI 53583

As interest may appear:

Duane Chapman, Chapman Brothers Farms, 21509 Gladeview Avenue, Tomah, WI 54660
Jim Mlsna, E16843 Kouke Valley Road, Hillsboro, WI 54634

Art Thelen, Wild Rose Dairy, E11361 Buckeye Ridge Road, La Farge, WI
Mitch Breunig, 8667 County Road V, Sauk City, WI 53583
Brad Clark, Clark View Farms, 13096 County Highway P, Bagley, WI 53801
Representative Lee Nerison, S3035 CTH B, Westby, WI 54667
Rose Smyrska, Office of State Senator Dan Kapanke
John O'Brien, Office of State Senator Dale Schultz, P.O. Box 7882, Madison, WI 53707
Randy Endres, 1003 Ganser Drive, Waunakee, WI 53597
Sara Baldwin, E14899 Warner Avenue, Hillsboro, WI 54634
Melanie Oetzman, 735 S. Fern, Richland Center, WI 53581
William L. Taylor, Platteville, WI 53818
Wayne Clark, Clark View Farms, 12128 Ready Hollow Road, Bagley, WI 53801
Duane Bernet, Valley Mead Farms, N6395 [no road given], Monticello, WI 53570
Karen Topel, Agri-View Newspaper, 2001 Fish Hatchery Road, Madison, WI 53713
Ron Abing, Majestic View Dairy, 5532 Commercial Road, Lancaster, WI

August 17, 2005 – Jefferson

In support:

Don Hammes, Wisconsin Wildlife Federation, 3507 Valley Ridge Road, Middleton, WI 53562
Patrick Murphy, 11632 N. Crestwood Drive, Edgerton, WI 53534

In opposition:

Kevin Griswold, N8812 River Valley Road, Ixonia, WI 53036
Robert O. Wesenberg, W7879 County C, Fort Atkinson, WI 53538
Tom Novak, Total Crop Management, W939 Northey Road, Sullivan, WI 53178
Nick [last name illegible], N2316 Mehring Road, Jefferson, WI 53549
Lloyd W. Holterman, W3855 Ebenezer Drive, Watertown, WI 53094
Greg Schepen, 410 Olson Court, Mineral Point, WI 53565

As interest may appear:

John Lader, Wisconsin Pork Association, 3909 Wyoming Court, Janesville, WI 53546
Steve Hoffmann, S&R Egg Farm, N9416 Tamarack Road, Whitewater, WI 53190
Bob Uphoff, 4561 Meadowview Road, Madison, WI 53711
Jeff Opitz, 2314 Shady Lane Road, Saukville, WI 53080
Laurie Fischer, Dairy Business Association, 4039 Ponce De Leon, Oneida, WI 54155
Allan R. Fietz, Kutz Dairy, N3612 Will Road, Jefferson, WI
Ron Kutz, N3612 Will Road, Jefferson, WI 53549
Gary G. Ripp, Ripp's Dairy Valley, 6626 Ripp Drive, Dane, WI 53529
Alan Koepke, 37326 O'Neil Road, Oconomowoc, WI 53066
Daniel Wolf, Sunset Farms, Inc., 6507 Sunset Drive, Allenton, WI 53002
Rhonda Meinholz, 6964 County Road I, DeForest, WI 53532

August 18, 2005 – Eau Claire

In support:

Betty Wolcott, The Woodlands Land Preserve, Osseo, WI 54758
Doug Burrows, Wisconsin Wildlife Federation, 132 Viking Place, Eau Claire, WI 54701
Will Fante, 901 Platt Street, Eau Claire, WI 54703
Glenn Stoddard, 130 S. Barstow Street, Suite 2C, Eau Claire, WI 54701
Jim Carter, S11170 Lowes Creek Road, Eleva, WI 54738

In opposition:

John Pronschinske, S1976 Konkell Valley Road, Arcadia, WI
Lee Jensen, Five Star Dairy, E9817 590th Avenue, Elk Mound, WI 54739
John Van Doorn, N5751 County I, Tony, WI 54563

As interest may appear:

Mary Prestruel, N14255 190th Street, Prairie Farm, WI 54762
Audrey Kusilek, 336 Gerland Road, Rice Lake, WI 54868
Terry Anderson, 34 N. 7th Street, Barron, WI 54812
Richard E. Jensen, Five Star Dairy, 2793 County Highway N, Colfax, WI 54730

August 22, 2005 – Wausau

In support:

Laura Huber, Wisconsin Wildlife Federation, 5067 Sunset Circle, Vesper, WI 54489
Andy Johnson, 210 River Drive, Wausau, WI 54403
Jeff Handschke, N5590 Fairway Drive, New London, WI

In opposition:

Gary Sipiorski, Citizens State Bank of Loyal, 400 N. Main, Loyal, WI 54446
Robert Reigel, 9491 H-M Drive, Marshfield, WI
Bradley J. Guse, 7075 Ironwood Drive, Arpin, WI 54410
Ken Heiman, Nasonville Dairy, 9705 Highway H, Marshfield, WI 54449
[no name given] Skic's Inc., 14800 4th Avenue, Merrill, WI 54452
Ralph Bredl, Harmony-Ho Holsteins, C1956 Riviera Drive, Stratford, WI 54484
Shirley Nagel, N6841 Highway V, Deerbrook, WI 54424
John Nagel, N6841 Highway V, Deerbrook, WI 54424
Ken Hein, Maple Ridge Dairy, Inc., C1969 Riviera Drive, Stratford, WI 54484
Tom Mueller, 1715 West Townline Road, Athens, WI 54411
Richard A. Ran, Dic-Wisco Farms, Inc., N16743 Badger Avenue, Dorchester, WI 54425
Roger Erickson, Erickson Farms, Inc., W4196 Pine Creek Road, Neillsville, WI 54456

As interest may appear:

Jon Pesko, United Pride Dairy, W5614 Little Chicago Road, Phillips, WI 54555
Kenneth Buelow, N5701 Irish Road, Hilbert, WI 54129
Gale Gordon, Box 126, Nelsonville, WI 54458
Allen Beadles, N9150 Smith Drive, Sheldon, WI 54766
Philip Hein, Maple Ridge Dairy, EP4320 County Road E, Stratford, WI 54484
Doug Szemborski, Foxland Harvestore, Inc., 10732 County Road Y, Marshfield, WI 54449
Ed Jasurda, United Pride Dairy, N7822 Murphy Lake Lane, Phillips, WI 54555
Sandi Cihlar, 1075 Town Hall Road, Mosinee, WI 54455
Bill Harper, United Pride Dairy, W5993 Little Chicago Road, Phillips, WI 54555
Cynthia Worden, 5203 N. 69th Street, Wausau, WI 54403
Darrell Worden, 5203 N. 69th Street, Wausau, WI 54403
June King, Kingdom Haven Farm, Inc., 5117 CTH N, Edgar, WI 54426
Kevin King, Kingdom Haven Farm, Inc., 5117 CTH N, Edgar, WI 54426
Russ Wilson, P.O. Box 8050, Wausau, WI 54403

August 25, 2005 – Green Bay

In support:

Scott & Samantha Trembl, E758 Church Road, Luxemburg, WI 54217
Chuck Matyska, Wisconsin Wildlife Federation, 5055 County V, Cecil, WI 54111
Donald Schardt, 1471 Lakeshore Drive, Cleveland, WI 53015
Jill Bussiere, N5942 Meadow Road, Kewaunee, WI 54216
Judy Trembl, E758 Church Road, Luxemburg, WI 54217
Tim Hammelman, 12435 Lakeshore Road, Cleveland, WI 53015
Russ Tooley, Centerville Cares, 12505 LS, Cleveland, WI 53015
Taku C. Ronsman, 1688 Beaver Dam Drive, Green Bay, WI 54304
Ann Zelinski, Citizens for Responsible Agriculture and a Clean Environment, 5124 Old Highway Y, Maribel, WI 54227
Pete Andre, 9004 County Road X, Forestville, WI 54213
Milton Hassemer, 10713 Diamond Road, Whitelaw, WI 54247
Chris Zeman, 5810 Old Y, Maribel, WI 54227
Gary Tauchen, N3397 S. Broadway Road, Bonduel, WI 54107
Joyce Cisler, 12727 County Road R, Whitelaw, WI 54247
Wayne Cisler, 12727 County Road R, Whitelaw, WI 54247
Shirley Mecha, 7601 Hidden Valley Road, Maribel, WI 54227
Jerome Viste, Door County Environmental Council, Inc., 1916 Viste Road, Sturgeon Bay, WI
Barbara R. Schardt, 1471 Lakeshore Drive, Cleveland, WI 53015

In opposition:

Gordon Speirs, Shiloh Dairy, W1152 CTH K, Brillion, WI 54110
Jeff Polenske, 2121 E. Ridge Haven Lane, Appleton, WI 54913
Mark Proeber, 561 Nordic Court, Slinger, WI 53086

As interest may appear:

Vernon Newhouse, N4480 County Road E, Kaukauna, WI
Ben Todd Koss, E3991 County Road J, Kewaunee, WI
Kathy Lefebvre, East Shore Drive Neighborhood Assoc., 1731 E. Shore Circle, Green Bay, WI 54302
George Morgan, Cleveland, WI 53015
Andrew Hanson, Midwest Environmental Advocates, Inc., 702 E. Johnson St., Madison, WI 53703
Joe Van Asten, N4347 Highway J, Kaukauna, WI 54130
Dana Pronschinske, Dairy Business Association, 335 Blackberry Lane, #211, De Forest, WI 53532
Laurie Fischer, Dairy Business Association, 4039 Ponce De Leon, Oneida, WI 54155
Richard Van Sistine, Jr., N6851 Elm Road, Hilbert, WI 54129
Jennifer L. Keuning, Kewaunee County UW-Extension, 613 Dodge Street, Kewaunee, WI 54216
Bruce Verhasselt, W873 Golden Glow Road, Kaukauna, WI 54130
David R. Schneider, N6275 Vans Road, Hilbert, WI 54129

Changes to Rule Analysis and Fiscal Estimate

The rule analysis was modified to reflect the changes identified previously. The fiscal estimate was modified to reflect a minor increase in the net change in costs based on the increase of FTE positions from 1.4 to 1.5.

Response to Legislative Council Rules Clearinghouse Report

The response to the Rules Clearinghouse Report is contained in the Response to Comments attached to this report.

Final Regulatory Flexibility Analysis

It is expected that most CAFO's currently meet the definition of a small business. It is not expected that the proposed rule will have a significant economic impact on a substantial number of small businesses. The effects of the proposed rule changes on small businesses are addressed in detail in the attached Small Business/Final Regulatory Flexibility Analysis and Fiscal Impact Report-Private Sector.

**Chapter NR 243
Response to Comments**

I. Legislative Rules Clearinghouse Comments

All changes requested by the Wisconsin Legislative Council Rules Clearinghouse have been made except as explained below:

1. Comment: While it appears that the rule makes fairly substantial changes to the existing rule, it does not appear that the changes are so extensive as to make the rule unreadable if drafted with striking and underscoring. In fact, many of the changes are the creation of entirely new text. Preferably, the rule should be drafted to show the precise changes it makes to current law, through the creation, amendment, renumbering, and repeal of text.

Response: No change made to the rule. Information on changes has been added to the rule analysis. The Department initially attempted to draft the rule with redline/strikeout but found that the changes that were made were extensive enough to warrant repeal and recreation. The Department has modified the rule analysis to include how the proposed changes affect current law.

2. Comment: The rule defines many more terms than is necessary or appropriate.

Response: No change made. Historically, members of the public and the regulated community have requested that the Department place definitions in one section for easy reference and to assure statewide consistency.

3. Comment: The rule incorporates a large number of documents by reference. It might be helpful to include a provision similar in format to s. NR 600.10.

Response: Change made.

4. Comment: "Haylage," used in the definition of "raw materials," appears not to be a legitimate word; it does not appear in the unabridged versions of either the Webster's New International Dictionary or the Oxford English Dictionary. Why not just use "hay"?

Response: The term haylage has been retained in the code. Haylage is a common and specific term used in agriculture to distinguish between hay that is cut and used for other purposes and hay that is stored in a partially fermented state for animal feed.

5. Comment: Can the definition of "reviewable facility or system" be replaced with a definition such as "...a facility or system subject to review and approval by the department under s. ____"?

Response: No change made. The definition proposed in the comment creates a circular definition and does not provide the necessary general information on what types of systems are subject to Department review.

6. Comment: The definition of "unacceptable practice" should simply be "...a practice identified in s. NR 243.24 (1)."

Response: No change made. The definition is in the existing code language.

7. Comment: The note to s. NR 243.12 (3) refers to various forms. If these forms are available on the department's website, the note should indicate this.

Response: The location of the application and other forms on the website is subject to change and has not been included in the rule. Information on the most up to date website location is included in informational materials provided by the Department.

8. Comment: Section NR 243.121 (3) provides that the department must specify criteria for determining eligibility for general permit coverage in the WPDES general permit. If these specific criteria are of general applicability, they would meet the definition of the term "rule" in s. 227.01 (13), Stats., and should be included in the text of NR 243.

Response: No change made. The Department does not typically specify eligibility criteria for coverage under a given WPDES general permit as part of a code. Those criteria are determined through the issuance process for the given WPDES general permit, which includes an opportunity for public comment.

9. Comment: The inspection, maintenance, and record keeping requirements of s. NR 243.19 are not optional, so why are they referenced as a condition in s. NR 243.13 (2) (a)? See also s. NR 243.13 (3) (b).

Response: No change made. Under federal law, discharges are not allowed from the production area to navigable waters unless inspection and other requirements are also met.

10. Comment: It appears that s. NR 243.13 (4) (b) should apply to all large CAFOs, not just those housing horses and sheep. If this is the case, it should be moved to s. NR 243.13 (5).

Response: No change made. There are separate code provisions that apply to other operations that production area discharges comply with water quality standards.

11. Comment: Section NR 243.14 (4) uses the term "SWQMA" whereas the defined term is "WQMA." Later provisions use the term "WQMA." The defined term should always be used.

Response: No change made. SWQMA and WQMA each have individual definitions and are purposefully used differently in the code.

12. Comment: The note following s. NR 243.142 (3) conflicts with s. NR 243.142 (3) (intro.). The note, cross-referencing s. NR 243.142 (2) (a), states that department approval is not required for the transfer of responsibility for de minimus amounts of manure. Section NR 243.142 (3) (intro.), however, states that department approval is required for any transfer of responsibility, and s. NR 243.142 (2) (a) does not provide an exception.

Response: No change made. Section NR 243.142(3) states that Department approval is only required for distribution of materials under pars. (b) to (e), not de minimus amounts distributed under par. (a).

13. Comment: The title of s. NR 243.15 is "Submittal and approval of proposed facilities or systems," but only the first subsection addresses that topic; the remaining subsections relate to design requirements. Subsections (2) to (10) should be placed in a separate section.

Response: Partial change made. The title of the section has been renamed "Design, submittal and approval of proposed facilities or systems." Given that these actions are closely tied together, the Department has kept them together in the same section.

14. Comment: In s. NR 243.15 (1) (a) 2., more precise references should be provided, rather than referring to all of chs. NR 811 and 812.

Response: No change made. Chs. NR 811 and 812 are under revision and sections may be renumbered.

15. Comment: In the third sentence of s. NR 243.15 (3) (i), how is it determined whether "at the time of permit issuance" or "prior to November 30 after permit issuance" applies?

Response: No change made. The code identifies that the determination would be made through the permit issuance process.

16. Comment: Section NR 243.23 only repeats the requirements of other rules and so should all be placed in notes. The notes might appropriately follow s. NR 243.21.

Response: No change made. This is existing code language and the Department is not proposing changes to sections that are related to livestock performance standards and prohibitions.

17. Comment: In s. NR 243.25 (2), what enforcement is allowed in a case in which cost sharing is required but not available? This should be stated, for clarity and completeness.

Response: No change made. This is existing code language and the Department is not proposing changes to sections that are related to livestock performance standards and prohibitions. Also, this is already clarified in s. 281.16, Stats.-if cost-sharing is required but not available, the Department cannot require compliance.

18. Comment: Is a point source discharge by a small CAFO prohibited unless the discharge is covered by, and in compliance with, a WPDES permit?

Response: No change made. A small AFO may discharge without a permit until designated as a CAFO by the Department.

19. Comment: Section 2 (1) of the rule-making order should begin: "Except as provided in subs. (2) to (4).".

Response: No change made. Sub. (1) only applies to large CAFOs and sub. (4) is a reference to medium and small CAFOs.

II. US EPA Comments

1. Comment: US EPA made a number of technical and clarifying comments to the code.

Response: Some changes made. Where warranted, US EPA recommendations were included in the proposed rule.

2. Comment: The definition of saturated soil in proposed s. NR 243.03(52) *Wis. Adm. Code* may be difficult to apply in practice. Wisconsin should define the term in a practical manner. Please see the attached tables from the United States Department of Agriculture (USDA), Soil Conservation Service, (1972) and the USDA, Ohio Natural Resources Conservation Service (NRCS), (2003) for examples showing how to define or apply the term in a practical manner.

Response: No change made. The Department believes that the definition for saturated ground is appropriate and that the recommended language in the comment would more appropriately be contained in guidance on how to determine whether or not soil is saturated.

3. Comment: Wisconsin has properly defined the term "new source concentrated animal feeding operation" in proposed s. NR 243.115(2) *Wis. Adm. Code*. However, the notes following sub. (1) and sub. (2) are confusing given the way in which the term is defined. Wisconsin should revise the notes to eliminate the possibility for confusion, particularly as it relates to animal feeding operations (AFOs) that are newly-constructed after April 14, 2003, and later add animals to become Large concentrated animal feeding operations (CAFOs).

Response: Change made.

5. Comment: Proposed s. NR 243.12(2)(a) 3. and 4. *Wis. Adm. Code* allow certain plans and specifications to be submitted during the term of the permit. To ensure that there is no misunderstanding about the time for compliance with production area effluent limitations and adequate storage requirements, the allowances in proposed par. 3. and 4. should be revised so they are conditioned by the requirements in SECTION 2. INITIAL APPLICABILITY of the proposed code package.

Response: Partial change. A note has been added to the code clarifying that compliance with production area requirements is not extended by Department approval to submit plans and specification and evaluations during the term of the permit.

6. Comment: Wisconsin needs to revise proposed s. NR 243.13(2)(a) 1. and 2. *Wis. Adm. Code* to strike the references to "facility" and "facilities" at least as the words would apply to Wisconsin Large CAFOs that are subject to 40 CFR part 412, subparts C and D. This required change will establish that the exception to the discharge prohibition applies only when, among other conditions, the discharge consists of an overflow from a *structure* (e.g., a tank, pond or lagoon, or pit) that is designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour rainfall event.

Response: Change made. In addition, a note was added to the code indicating that production area discharges are only allowed from structures and that wastewater treatment strips, buffers and grassed water ways do not constitute structures.

7. Comment: On February 28, 2005, the United States Court of Appeals for the Second Circuit vacated provisions of the federal regulations which allow permit authorities to: (a) issue permits to CAFOs without including the terms of nutrient management plans in permits, (b) without reviewing plans, and (c) with plans remaining at the CAFO and thus unavailable to the public. *Waterkeeper Alliance, et al., v. USEPA*, 2005 WL 453139 (2nd Cir.). USEPA, Region 5, evaluated proposed s. NR 243.14(1) *Wis. Adm. Code* in the context of the *Waterkeeper* decision. This subsection provides, in part, that CAFOs shall submit their nutrient management plans to the Wisconsin Department of Natural Resources (WDNR) for review and approval. We find that the subsection conforms to *Waterkeeper* decision items (b) and (c), as summarized above, and will not prevent Wisconsin from administering its program in conformance with decision item (a).

Response: Thank you for the comment.

8. Comment: Proposed s. NR 243.14 *Wis. Adm. Code* needs to be revised to incorporate the requirements of 40 CFR § 122.42(e)(1)(iii), (vi), and (vii). To address 40 CFR § 122.42(e)(1)(vi), Wisconsin should require CAFOs to employ conservation practices that reduce erosion from land application areas at least to the tolerable rate (T).

Response: Partial change made. The Department has added language to ss. NR 243.13 and NR 243.19 to address clean water diversions and protocols for testing manure, soil and process wastewater. NRCS Standard 590, which is incorporated by reference into NR 243, addresses soil sampling (V.A.1.c.) and prohibits the application of manure on fields that exceed "T" (V.A.2.a.(6)).

9. Comment: Proposed s. NR 243.14 *Wis. Adm. Code* needs to be revised to require Large CAFOs to: (a) annually analyze manure and process wastewater for nitrogen and phosphorus content and (b) use the results of manure, process wastewater, and soil analyses to determine application rates for manure and process wastewater. 40 CFR § 412.4(c)(3).

Response: Partial change made. Requirements to analyze manure are contained in s. NR 243.19(1)(c). This requirement has been modified so that manure shall be analyzed on an annual basis for nutrients, at

a minimum, or more frequently if specified in a WPDES permit, unless applications in a given year do not occur. The Department has created s. NR 243.14(2)(f) to reflect comment (b).

10. Comment: Where manure or process wastewater will be surface applied and subsurface drains are not present within the land application area, Wisconsin protocols should require soil samples to be collected from a shallow depth (i.e., from one to two inches). This recommendation is consistent with Sharpley, *et al.*, (2003) who stated that, "[i]t is generally recommended that soil samples be collected to plow depth, usually 6 to 8 inches for routine evaluation of soil fertility. However, it is the surface inch or two in direct contact with runoff that is important when using soil testing to estimate P loss. Consequently, different sampling procedures may be necessary when using a soil test to estimate the potential for P loss."

Response: No change made. The Department supports the method used to obtain samples for soil tests outlined in NRCS Standard 590 in order to promote consistency with regard to the Soil Test Phosphorus method for addressing phosphorus delivery. For operations using the Wisconsin Phosphorus Index (P-Index), the P-Index calculations estimating runoff and eroded sediment phosphorus concentrations, account for soil stratification and adjusts plow layer soil test P values to surface soil P values.

11. Comment: Proposed s. NR 243.14(2)(c) *Wis. Adm. Code* provides, in part, that process wastewater may be applied to frozen ground in accordance with the requirements of s. NR 214.17(2) to (6) *Wis. Adm. Code*. s. NR 214.17(4)(d) *Wis. Adm. Code*. Under frozen ground conditions, the maximum daily volume in s. NR 214.17(4)(d) 5. *Wis. Adm. Code* is not reasonably likely to prevent runoff of process wastewater. This conclusion is based on a comparison of the 6,800 gallons per acre (gal/ac) volume with EPA with EPA calculations of the hydraulic rate necessary to avoid runoff.

Response: Partial change made. The Department has a long-standing history of regulation of industrial wastewaters under NR 214 that are more similar to CAFO process wastewaters than manure and believe that the winter restrictions contained in NR 214 are appropriate for CAFO process wastewater. In response to USEPA concerns, in addition to the restrictions in NR 214, the Department has included the following additional requirements for operations surface applying process wastewater under frozen or snow-covered conditions:

- All surface applications of process wastewater on frozen or snow-covered ground must result in a Winter Acute Loss Index value of 4 or less (using the Wisconsin Phosphorus Index) (see NR 243.14(8)).
- Permittees shall inspect surface applications on frozen or snow-covered ground during and shortly after application to document whether or not runoff has occurred (see NR 243.19(1)(a)6.)

12. Comment: Proposed s. NR 243.14(2)(c) *Wis. Adm. Code* provides, in part, that process wastewater may be applied to snow-covered ground in accordance with the requirements of s. NR 214.17(2) to (6) *Wis. Adm. Code*. USEPA, Region 5, reserves comments on this provision.

Response: Partial change made. The Department believes that the approach outlined in the response to comment #11 of this section will address future concerns of USEPA regarding applications of process wastewater on snow-covered ground.

13. Comment: Proposed s. NR 243.14(2)(d) *Wis. Adm. Code* requires a permittee to consider several factors when making decisions about the times at which manure and process wastewater may be applied on land (the probability, intensity, and form of predicted upcoming precipitation are among the factors). This will not ensure compliance with proposed s. NR 243.14(2)(b) 1. *Wis. Adm. Code*. Wisconsin needs to revise proposed sub. (2)(d) to prohibit surface application of manure or process wastewater on land that is upslope from waters of the United States and conduits to such waters when the National Weather Service predicts a high probability (e.g., 50 percent or greater chance) of rain, in an amount likely to cause runoff, for the period extending 24 hours after the conclusion of an intended land application event.

Revising the proposed code in this manner should prevent fish kills that can result when significant rain falls soon after manure or process wastewater has been surface applied.

Response: Change made. The Department has deleted s. NR 243.14(d)1. and has created s. NR 243.14(b)10. to read:

"Manure or process wastewater may not be surface applied when the National Weather Service predicts, within 24 hours of the end of the application, a 70% chance or greater of 0.5 inches of rain during non-frozen or non-snow-covered ground conditions or a 50% chance or greater of 0.25 inches of rain during frozen or snow-covered ground conditions."

The prior code language has been converted into a note.

14. Comment: Illinois, Indiana, Michigan, Minnesota, and Ohio have concluded that there is a high or very high risk of phosphorus movement to surface waters where the soil test phosphorus level (Bray P1) falls at levels ranging above 75 ppm to 150 ppm. These states either prohibit additional applications on these fields or multi-year phosphorus applications associated with manure and process wastewater on these fields. Wisconsin needs to explain why soil test phosphorus levels between 100 and 150 ppm do not produce a high risk of phosphorus movement to surface waters in Wisconsin. Alternatively, Wisconsin could (and should) revise proposed s. NR 243.14(5)(a) 2. *Wis. Adm. Code* to provide that applications of manure and process wastewater may not exceed the phosphorus removal of the following growing season's crop when the soil test phosphorus level is between 100 and 200 ppm.

Response: Partial change made. See response to comment #15 of this section.

15. Comment: Wisconsin needs to revise proposed s. NR 243.14(5)(a) 3. *Wis. Adm. Code* to provide that the application of manure and process wastewater is prohibited on fields with soil test phosphorus levels greater than 200 ppm. On these fields, phosphorus levels are so high that any application of manure, litter, or process wastewater would be inconsistent with appropriate agricultural utilization of nutrients and would lead to excessive levels of nutrients and other pollutants in runoff. As an alternative, a permittee may use a department approved method for assessing and minimizing the risk of phosphorus delivery to waters.

Response: Partial change made. The Department has modified the restrictions for operations that want to apply manure and process wastewater on fields with soil test phosphorus levels greater than 100 ppm to address the comment. Recognizing that fields with higher soil test phosphorus levels represent a potential higher risk of delivery than fields with lower phosphorus, the Department is proposing the following restrictions for fields with soil test phosphorus levels of 100 ppm or greater.

- Soil test levels between 100 and 200 ppm: Operations would be allowed to apply manure and process wastewater on these fields provided they run the Wisconsin Phosphorus Index (P-Index) and achieve an average P-Index of value of 6 or less for the field over a four year period or the rotation, whichever is less, and they limit the application to 50% of crop need over the rotation or four year period, whichever is less.
- 200 ppm or greater: Operations would be allowed to apply manure and process wastewater on these fields provided they run the Wisconsin Phosphorus Index (P-Index) and achieve a P-Index value of 6 or less for the field over a four year period or the rotation, whichever is less, they limit the application to 50% of crop need over the rotation or four year period, whichever is less, and are able to demonstrate that that phosphorus delivery will not significantly increase as a result of the application of manure or process wastewater.

These requirements will allow applications on fields with higher soil test phosphorus levels when needed, will provide for the drawing down of soil test phosphorus levels over time, and ensure that the risk of phosphorus delivery to surface water is minimized.

16. Comment: USEPA, Region 5, has no objection to Wisconsin providing an alternative to the requirement to the soil test phosphorus method for assessing the risk of phosphorus delivery. However, as proposed, the language in s. NR 243.15(5) does not establish an alternative method for assessing the risk of phosphorus delivery and it does not establish a standard for the maximum rate at which manure and process wastewater phosphorus may be applied on land. Wisconsin needs to establish such a method and such rates if it wishes to provide an alternative to the soil test phosphorus method.

Response: Change made. Consistent with NRCS Standard 590, the Department has incorporated the Wisconsin Phosphorus Index (P-Index) into NR 243 as an additional method of assessing and minimizing phosphorus delivery. In addition to specific practices in NRCS Standard 590 (e.g., nutrient budgets, conservation planning) and NR 243 designed to address nutrient delivery to waters of the state, application rates for manure and process wastewater will be further restricted based on achieving a rotational P-Index of 6 or less. In doing so, permittees will be assessing and minimizing the risk of phosphorus delivery to waters.

17. Comment: Proposed s. NR 243.14(6) and (7) *Wis. Adm. Code* includes technical standards for surface application of manure in the winter. USEPA, Region 5, finds that the sub. (6) and (7) technical standards will minimize nutrient movement to waters where waters of the United States, sinkholes, open tile line intake structures, and other conduits to waters of the United States (hereinafter collectively "waters") are upslope from the land application area. In addition, we find that the standards will minimize nutrient movement to waters where nutrients need to be applied in the winter to grow a winter crop.

Response: Thank you for the comment.

18. Comment: Except as qualified by other comments, USEPA, Region 5, reserves comments on the proposed s. NR 243.14(6) and (7) *Wis. Adm. Code* standards as they pertain to surface application of the following materials in the winter: (a) beef cattle, heifer, calf, and turkey manure and (b) swine manure when the manure has been removed from storage following agitation.

Response: Partial change made. The Department believes that the approach outlined in the response to comment #22 of this section will address future concerns of USEPA regarding applications of these manures on snow-covered ground.

19. Comment: Proposed s. NR 243.14, table 5, *Wis. Adm. Code* provides maximum rates for emergency surface application of liquid manure on frozen ground. Under most scenarios involving surface application of liquid manure on soil that is frozen but not covered with snow, the rates in proposed s. NR 243.14, table 5, *Wis. Adm. Code* are not reasonably likely to ensure compliance with proposed s. NR 243.14(2)(b) 1. *Wis. Adm. Code*. Wisconsin needs to revise proposed s. NR 243.14(7) *Wis. Adm. Code* to provide that the hydraulic rate at which liquid manure may be applied on ground that is frozen but not covered with snow shall be limited to prevent runoff.

Response: See response to comment #22 of this section.

20. Comment: Proposed s. NR 243.14(6) *Wis. Adm. Code* includes technical standards for surface application of solid manure in the winter. USEPA, Region 5, evaluated the standards as they affect the movement of nutrients and manure pollutants in runoff from melted snow where waters are downslope from the land application area and a crop will not be grown in the winter or nutrients need not be applied in that season to grow a winter crop. Based on the evaluation, we find that the technical standards in will not minimize movement of nutrients when layer and broiler manure Hydrologic Soil Group B, C, and D soils in the winter.

Response: See response to comment #22 of this section.

21. Comment: In emergencies, proposed s. NR 243.14(7)(d) provides that surface application can occur as long as the application is approved by the State and conforms to (a) the restrictions in proposed s. NR 243.14, table 5, *Wis. Adm. Code* or (b) State-approved restrictions other than those in table 5.

Separately, proposed sub. (e) provides that the standards summarized in a. through c., above, do not apply to existing source CAFOs before 2010. Based on the evaluation, we find that the technical standards in table 5 will minimize nutrient movement to waters when (a) swine manure is removed from storage without agitation and surface applied on any snow-covered soil or (b) mature dairy cow manure is surface applied on snow-covered Hydrologic Soil Group A soils. Furthermore, we find that the technical standards in table 5 will not minimize movement of nutrients to waters when mature dairy cow manure is surface applied on Hydrologic Soil Group B, C, or D soils. As a result, Wisconsin needs to revise proposed s. NR 243.14(7) *Wis. Adm. Code* to (a) prohibit all surface applications of mature dairy cow manure on Hydrologic Soil Group B, C, and D soils in the winter or (b) include management practices that will minimize nutrient movement to waters when mature dairy cow manure is surface applied on Hydrologic Soil Group B, C, or D soils in the winter.

Response: See response to comment #22 of this section.

22. Comment: Proposed s. NR 243.14(7)(d) 3. *Wis. Adm. Code* provides that the State may approve sites and restrictions for emergency applications of liquid manure on frozen or snow-covered ground other than the restrictions in proposed s. NR 243.14, table 5, *Wis. Adm. Code*. USEPA, Region 5, finds that this provision does not conform to 40 CFR § 123.36 because it does not establish a technical standard for emergency applications of liquid manure on frozen or snow-covered ground. Wisconsin needs to strike this provision from the code

Response: Change made. Except for specific comments outlined below, the Department has included the following provisions, in addition to the restrictions already included in NRCS Standard 590 and ss. NR 243.14(6) and (7), to address EPA concerns regarding surface applications of manure on frozen or snow-covered soil, including emergency and frozen manure applications:

- All surface applications of process wastewater on frozen or snow-covered ground must result in a Winter Acute Loss Index value of 4 or less (using the Wisconsin Phosphorus Index) (see NR 243.14(7)(d)3. and (8)). These fields are viewed as being low risk for runoff during frozen or snow-covered ground conditions.
- Permittees shall inspect surface applications on frozen or snow-covered ground during and shortly after application to document whether or not runoff has occurred (see NR 243.19(1)(a)6.)

The Department believes that given the potential variability of phosphorus concentrations in manure and process wastewater beyond the levels identified in Midwest Plan Service documents, Table 5 appropriately contains the option of limiting applications based on a hydraulic application loading rate or on limits in a nutrient management plan. The Department has added clarification that P_2O_5 limits in the nutrient management plan must not exceed the P nutrient budget for the following year's crop, taking into account previous P applications.

23. Comment: Proposed s. NR 243.14(7)(e) *Wis. Adm. Code* provides that existing source CAFOs which do not have 180 days of manure storage capacity may surface apply liquid manure on frozen or snow-covered ground before January 1, 2010. USEPA, Region 5, recommends that Wisconsin should exclude AFOs that increase animal numbers to become Large CAFOs after the effective date of the recreated code. Wisconsin should require these CAFOs to comply with technical standards for surface application of liquid manure upon permit issuance or by December 31, 2006, whichever is later. AFOs that increase animal numbers to become Large CAFOs typically engage in planning, design, and construction activities before they become Large CAFOs.

In addition USEPA, Region V, recommends that Wisconsin should require other existing source Large CAFOs to comply with the technical standards for liquid manure surface application in the winter as expeditiously as practicable but in no case later than three years after the effective date of the recreated code. To develop this recommendation, USEPA, Region 5, referred to the Clean Water Act, section 301(b)(2)(E) and (F), 33 United States Code (USC) § 1331(b)(2)(E) and (F), for guidance. In this section, Congress required compliance with effluent limitations guidelines for conventional and other pollutants as expeditiously as practicable but in no case later than three years after the effective date of the guidelines.

Our recommendation concerning the compliance deadline for other Large CAFOs balances the fact that federal regulations require implementation of nutrient management plans by December 31, 2006, with the fact that Wisconsin has discretion to establish technical standards that minimize nutrient movement to waters including discretion to establish reasonable schedules for compliance with the standards.

Response: The Department believes that adding reduced compliance schedules for a limited number of operations adds unnecessary complexity to the rule. CAFOs in Wisconsin have been developing and implementing nutrient management plans since the WDNR began issuing WPDES permits in the mid-1980's. CAFO nutrient management plans for most CAFOs will reflect the revisions (phosphorus-based requirements, SWQMA restrictions) to NR 243 prior to July 31, 2007. It is only the storage requirement and frozen or snow covered ground requirement for operations without 180-day storage that become effective Jan. 1, 2010 for liquid manure, for a limited number of operations, a date that will meet or is likely to meet the three year schedule recommended by US EPA.

In addition, the Department currently estimates that approximately 80% of permitted operations have 180-days of storage. The Department also believes that many future CAFOs will design to have 180-days of storage prior to or soon after permit issuance because of the planning efforts described in the comment above. In addition, operations that already have six months of storage for liquid manure will be required to maintain six months of storage for liquid manure. However, the Department continues to believe that for some operations, additional time is likely necessary to finance and construct storage. From a practical standpoint, allowing a limited number of producers to land apply on frozen or snow-covered ground prior to January 1, 2010, ensures these operations are able to operate financially while protecting the environment. Given that promulgation of NR 243 is likely to occur in mid to late 2006, the January 1, 2010, restriction will likely meet or be very close to meeting the three years compliance period recommended by US EPA. It should be noted that operations that are allowed to apply manure on frozen or snow-covered ground prior to January 1, 2010, will continue to be subject to restrictive application requirements.

24. Comment: The federal Effluent Limitations Guidelines and New Source Performance Standards prohibit the discharge of manure, litter, or process wastewater pollutants from production areas at Large CAFOs that are subject to 40 CFR part 412, subparts C and D. An exception arises when, subject to additional conditions, a discharge is caused by precipitation and consists of an overflow from a structure that is designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour rainfall event. Wisconsin should advise Large CAFOs that certain accepted management practices referenced in proposed s. NR 243.15(2) *Wis. Adm. Code*, including wastewater treatment strips and grassed waterways, are not structures and, thus, are not likely to ensure compliance with the revised standard in s. NR 243.13(2)(a) *Wis. Adm. Code*. (The recommended advisory also applies to feed storage facilities and associated runoff control systems, the design and construction of which may be approved by the State under proposed s. NR 243.15(9) *Wis. Adm. Code*.) Wisconsin should further advise Large CAFOs that approval of a runoff control system does not constitute a defense in an enforcement action for violation of permit effluent limitations applicable to production area discharges.

Response: Change made. The Department concurs that certain referenced practices such as grassed waterways and filter strips do not constitute a structure and thus, do not allow for a discharge to navigable waters under any circumstance, including storm events greater than the 25-year, 24-hour storm events for most operations. It is the duty of the permittee to properly manage its operation to ensure there are no discharges to navigable waters. A note has been added after ss. NR 243.141(3)(c) and NR 243.15(2) stating respectively:

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.

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.

In addition, the WDNR has added the following advisory language to the code after s. NR 243.15(1)(a):

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.

25. Comment: Wisconsin needs to revise proposed s. NR 243.19(1)(a) *Wis. Adm. Code* to expressly require CAFOs to have a depth marker for their open surface liquid impoundments with such markers clearly indicating the capacity necessary to contain the runoff and direct precipitation from the 25-year, 24-hour rainfall event. 40 CFR § 412.37(a)(2).

Response: Partial change made. Section NR 243.15(3)(e) contains requirements that all proposed liquid storage or containment structures have permanent markers indicating the maximum operating level which indicates the level necessary to contain precipitation and runoff from the appropriate storm event for a given animal type. In addition, s. NR 243.16(4) has been modified to clearly indicate that previously constructed structure have markers in place by January 1, 2010.

26. Comment: Wisconsin needs to revise proposed s. NR 243.19(2)(b) *Wis. Adm. Code* to require CAFOs to generate and keep records: (a) on expected crop yields, (b) explaining the basis for determining manure and process wastewater application rates, and (c) showing calculations on the total nitrogen and phosphorus to be applied to each field, including sources other than manure and process wastewater. 40 CFR § 412.37(c)

Response: No change made. Section NR 243.14 requires permittees to develop a nutrient management plan in accordance with NRCS Standard 590 (which is incorporated by reference into NR 243) that takes into account expected yield goals (590, Part V.A.1.b.), manure application rates based on nutrient budgets (590, Parts II and V.A.1.a.) and other restrictions (590, Parts V.A., B., and C and s. NR 243.14(1)-(10)). The nutrient management plan is considered a term of the permit. In addition, permittees must submit an annual report in accordance with s. NR 243.19(3)(c)5. The annual report is also a record. In accordance with s. NR 243.19(2), the permittee shall retain these records for at least 5 years.

27. Comment: A discharge that consists entirely of manure appears not to be contemplated within the definition of "contaminated runoff." As a result, proposed s. NR 243.26(4)(a) 2. *Wis. Adm. Code* needs to be revised as follows: "Addresses discharges of manure and contaminated runoff from the production area in a manner that is consistent with accepted management practices and that treats or contains all manure and contaminated runoff ..."

Response: Change made.

28. Comment: Proposed s. NR 243.26(4)(a) 2. *Wis. Adm. Code* provides that permits issued to Medium and Small CAFOs shall address contaminated runoff from the production area in a manner that is consistent with accepted management practices and treats or contains all contaminated runoff for storm events up to and including the 25-year, 24-hour storm event. USEPA believes that, in many cases, Wisconsin will find it appropriate to develop effluent limitations for production area discharges from Medium and Small CAFOs which are based on containment technology. Wisconsin has discretion to establish effluent limitations based on a technology other than containment in accordance with USEPA (2003), section 4.1.1. In any event, Wisconsin needs to revise proposed s. NR 243.26(4)(a) 2. *Wis. Adm. Code* to explicitly provide that the State will consider the factors in 40 CFR § 125.3(d) when it establishes technology-based effluent limitations applicable to production area discharges from Medium and Small CAFOs.

Response: Change made. In response to the comment, the Department has included a note that the Department will consider the factors contained in 40 CFR § 125.3(d) when determining accepted management practices for small and medium CAFOs.

III. Other Agency Comments

NRCS

1. Comment: Wisconsin NRCS submitted a number of comments related to definitions and use of NRCS Technical Standards in NR 243.

Response: Some changes made. The Department modified the definition of "wastewater treatment" strip, Table 3, and removed sections of s. NR 243.15(3) already included in the code under NRCS Standard 313, in response to the comments.

DATCP

2. Comment: DATCP commented that one of the rationales for creation of the Livestock Siting Rule (ATCP 51) is to reduce the regulatory burden on farmers to site and expand livestock facilities. DATCP hopes that the increased review time required under revised NR 243 for nutrient management plans and manure storage facilities does not result in unnecessary delays in issuing permits to the livestock industry.

Response: No change made. The Department recognizes concerns associated with additional reviews and time to complete such reviews and has attempted to minimize these impacts as much as possible. In some areas, the rule revisions will decrease the time of reviews by promoting consistency from operation to operation. In other areas, particularly where mandated by US EPA or as needed to ensure permit compliance and protect water quality, additional reviews associated with the rule revision are necessary. The Department remains committed to ensuring timely review of all permit applications and approvals.

3. Comment: In areas where DATCP does not have specific comments, we generally support rule requirements and believe they provide the necessary flexibility for agriculture to grow in Wisconsin while protecting water quality and public health, safety and welfare. DATCP recognizes and supports the Department's mission of protecting Wisconsin's environment and health and safety of Wisconsin residents and visitors and hopes to remain a valued partner in ensuring a sustainable future for agriculture and a high-quality natural environment.

Response: No change made. Thank you for the comment.

4. Comment: DATCP would like to see clarification, including in the rule, on how NR 243 affects contract growers.

Response: No change made. Given the number of potential scenarios associated with contract growers, the Department believes that current language in NR 243 provides the necessary flexibility to properly address potential permit issues associated with contract growers and does not believe further clarification is needed.

5. Comment: The ATCP Board passed a resolution urging the DNR to coordinate its final "animal unit" (AU) rule proposal with DATCP, the Legislature, the livestock industry and other interested parties, so that the rulemaking does not have unintended consequences affecting DATCP administration of the Livestock Facility Siting Law or rules. DATCP commented that the Department should calculate AUs based on more precise methods than proposed by EPA. Owners of smaller dairy breeds should be allowed to use actual live animal weights to determine AU equivalency and not be forced to use a table designed for larger dairy breeds. In addition, DATCP strongly recommended a narrowly crafted mixed AU exemption in order to better reflect the actual weight and manure production of the broilers. Such an

exemption would recognize the investments made by farms under current rule requirements, thus continuing to grow Wisconsin's agriculture, while continuing to protect its water resources.

DATCP also commented that it is inequitable that proposed revisions to NR 243 would require permits for operations now under the 1000 AU threshold to obtain a permit.

Response: Some changes made. The Department has proposed modifications to the method of calculating AUs (see response to comment #46, section V). The proposed approach would primarily sustain the status quo under NR 243 as it exists now. A few operations will be required to obtain permits based strictly on federal rule changes that impact how NR 243 calculates animal units for individual animal types. The Department believes it is important to maintain current NR 243 animal units for the mixed AU calculation in order to avoid a rollback of current code requirements. The Department has been in contact with DATCP and presented the new approach during hearings on proposed legislation that would impact how the Department calculates animal units.

6. Comment: DATCP commented on a number of conditions it believed were confusing and that would result in inconsistent application from one permit writer to the next (SWQMA restrictions, winter spreading restrictions, restrictions based on separation to groundwater or bedrock). It commented that more consistent implementation could occur if the 590 standard was followed. DATCP recommended a number of possible changes to simplify the rule and promote consistency with the 590 standard.

Response: No change made. The revisions to NR 243 are intended to promote consistency from permit to permit and to provide water quality protection. The 590 Standard primarily promotes nutrient management and has some limitations when addressing water quality impacts from CAFOs on a case-by-case basis. Also see the response to comment #12, section V, regarding consistency with the 590 standard.

7. Comment: DATCP recommends requiring incorporation within 72 hours rather than 48 hours in order to promote consistency with the 590 Standard and to avoid damage to the soil structure.

Response: No change made. One of the Department's concerns of allowing up to 72 hours for incorporation in certain areas is the potential for rain events to cause manure runoff as a result of the manure saturating or nearly saturating the soil. Incorporation within 48 hours will reduce this potential source of runoff and allow producers to use their judgment to determine application rates that are needed to avoid damages to soil structure.

8. Comment: DATCP commends NR 243 Green Tier provisions and provisions that allow use of innovative technologies. We believe these provisions will encourage livestock operator innovation and enhance resource protection.

Response: Change made. The Green Tier code language has been removed and a note has been added instead. This was done in order to avoid confusion on how the Department implements the Green Tier program and in response to Legislative Rules Clearinghouse Comments. The Department remains committed to the Green Tier program for CAFOs. However, code language is not required to implement the Green Tier program. Standard language regarding variances remains in the code.

9. Comment: To be equal or more restrictive than 590 and livestock siting, NR 243 should specifically require that fields where manure and process wastewater are applied meet "T" and require a conservation plan to be developed for additional winter restrictions not listed in the 590 Standard (phosphorus restrictions, applications near wells and karst features)

Response: No change made. NR 243 is equally or more restrictive than the 590 Standard and the Livestock Siting Rule as it relates to water quality impacts. NR 243 incorporates the 590 Standard by reference. The requirements in the 590 Standard apply to CAFO nutrient management plans unless specifically superseded by NR 243 requirements.

10. Comment: NR 243 requires visual inspection of various farm operations and at various frequencies. While DATCP believes that most operators will conduct such inspections as a routine part of their facility management, we recognize that some specific inspection requirements need to be part of this rule and support these provisions.

Response: Thank you for the comment.

11. Comment: DATCP agrees with the need for an emergency response plan. Such plans may help resolve manure management incidences in a more timely manner and therefore with less impact on the water resources. However, the requirement should be stronger and consistent with proposed ATCP 51, which requires procedures to respond to odor complaints and includes an employee training component.

Response: While the Department supports these concepts, it does not have authority to require them under NR 243 emergency response plans.

IV. Small Business Regulatory Review Board Comments

1. Comment: The SBRRB finds that the agency adequately describes the small business entities that will be affected by the rule. The DNR implies that the majority of businesses affected by the proposed rule meet the definition of small business as contained in Wis. Stats. 227.114(1).

Response: The DNR is assuming that all affected livestock operations are small businesses and the calculations and impacts have been assessed accordingly.

2. Comment: The SBRRB finds that the agency did not, to the extent possible, describe the diversity in the size of regulated entities, revenues in each size grouping or the profitability in each size group. A significant discrepancy exists in the amount of economic impact reported between the compliance costs estimated by the Wisconsin Dairy Business Association and those estimated by the DNR. The Board notes that the IRFA contains cost information about the operators currently regulated, however, the analysis is extremely limited in analyzing the costs to new operators required to comply if the rule is adopted as proposed.

Response: The types of livestock operations impacted by this rule are 85% dairy, 8% poultry and 7% swine or beef. Operations can be made up of any combinations of poultry, dairy and swine or beef. Under dairy, an operation can include heifer only operations rather than the milking/dry cows, heifers and calves that typically make up a dairy operation. The typical dairy would include a herd size of 920 animals (from all groups) before it would be considered a large CAFO (over 1,000 animal units). Under the current NR 243, a poultry operation would house 200,000 broilers before it would be considered a large CAFO and require a permit. Under the revised rule, the number will drop to 125,000 broilers, based on federal requirements.

DNR has attempted to gather financial information about livestock operations from financial specialists, university authorities, dairy associations and agricultural departments. This information is considered proprietary and without financial or tax records of individual farms, information on revenues and profitability in each size group is not available. As one financial adviser indicated, profitability is related to the overhead an operation is carrying and cannot be directly correlated to herd size.

SBRRB has indicated a concern that the economic impact, as projected by the Wisconsin Dairy Business Association (DBA), is greater than the economic projection from DNR. Since the cost estimates by DBA was not shared with DNR, it is difficult to compare those figures with ours. Assumptions were made on both sides in order to arrive at a cost projection. However, a large part of the contention was based on the number of livestock operations that may need to receive permit coverage. DNR's number was 85 and DBA's was 250. In response to public comments, the DNR has modified the animal unit calculation and as a result fewer operations will be affected. The new figure is that 15 operations will immediately come under the rule. The revised animal unit calculations have been shared with DBA.

3. Comment: The SBRRB finds that DNR may need to do further analysis to determine whether or not the IRFA contains a fair first-estimate of expected economic impacts on the affected entities.

Response: The DNR has updated the fiscal impact report with the new number of affected operations. The report identifies the sources of the information provided. Any comments received during the public notice period that included cost projections for certain activities were checked for consistency. Our projected numbers for nutrient management and manure storage are consistent with numbers submitted by the public.

4. Comment: The SBRRB finds that identification as to whether or not the first-estimate costs are significant or insignificant is difficult to determine because the IRFA does not contain a fair first estimate of the expected economic impact on the affected entities. If the proposed mixed-use animal unit calculation is adopted, the Wisconsin Dairy Business Association estimates an economic impact to approximately 250 operators. The DNR cites a much lower number of operators.

Response: As indicated in the response to comment #2 of this section, the DNR has modified the mixed-use animal unit calculation and has shared this information with DBA. The conclusion is that the economic impact will not be significant because less than 1% of all livestock operations in the state will come under permit coverage.

5. Comment: The SBRRB is unclear on whether correct criteria were used in determining whether a substantial number of small businesses would be affected by the rule.

Response: See the response to comment #2 and #4 of this section.

6. Comment: The SBRRB has questions on the process used to acquire quantitative or other information to support the agency's initial regulatory flexibility analysis to determine the fiscal impact on small businesses. The Wisconsin Dairy Business Association believes that if this rule is adopted as proposed, producers will need to reduce animals in order to comply with the new requirements, adversely affecting the Wisconsin economy.

Response: The revised fiscal impact report identifies all sources of information used in the fiscal assessment. DBA has not provided their numbers or sources to DNR for comparison. In the absence of documentation that indicates DNR sources are incorrect, the DNR will continue to use the values identified in the report.

The rule has been revised from the version reviewed by the SBRRB. The new revisions have resulted in maintaining the status quo for operations that were identified as needing permit coverage under the current NR 243 and adding to that list only those operations that are mandated by the federal government. It is clear that some operations will now be considered a large CAFO by federal standards that were not classified as CAFOs by the state under current NR 243. If an individual operation chooses to reduce their number of animal units rather than apply for a permit, they have that option. Notably, animal reduction has been available to producers since NR 243 was initially promulgated in 1980.

7. Comment: The rule will result in increased costs to affected businesses and includes increased reporting requirements.

Response: DNR is making efforts to provide standard forms to affected businesses and to provide flexibility with compliance dates to minimize the increased costs.

8. Comment: The rule may provide benefits to small businesses that are yet to be determined based on unknown factors at the time. For example, benefits may exist if flexible dates are written into the rule that would allow for changing weather and field conditions.

Response: The DNR has provided flexibility throughout the proposed rule to accommodate producers and producer groups concerns including; allowing stacking of solid manure rather than constructing more

costly manure storage facilities for certain types of solid manure; allowing lower levels of manure storage than the required 180 days to allow for incremental expansion; extending the deadline to November 30th for first time permittees for construction of manure storage facilities; allowing stacking for eight months from the time of stacking rather than removing all stacks by June 30th; allowing permittees 90 days to apply for permits for newly acquired property; and providing several options for practices near surface waters (the SWQMA) that are potentially equivalent to the federal 100-foot setback requirement.

9. Comment: The rule may provide benefits to the public; however, SBRRB recommends that DNR carefully consider the imposition of significant burdens on small business with limited environmental benefits.

Response: The DNR has minimized the costs where possible. Where DNR does not have discretion, due to federal requirements, the costs could not be modified. The benefit to the public and the environment comes from careful handling and disposal of manure and the tracking of an operation's activities to ensure compliance. Members of the public are concerned when wells are contaminated, fisheries are destroyed and water quality is compromised.

10. Comment: The SBRRB find it difficult to determine whether or not the benefits to the public outweigh the costs to the business. The SBRRB is concerned that the proposed rule may over-regulate the industry. This rule appears to go beyond the federal mandate, putting a heavier regulatory burden on small business. The SBRRB recommends that the DNR consider other alternatives that would be less burdensome to those small businesses affected by this proposed rule as mentioned below.

Response: The DNR has modified the mixed animal unit calculation and returned to the current NR 243 method of calculation. This has significantly reduced the number of operations potentially affected by the rule. The rule has been revised to include federal requirements which will bring an additional 15 operations into the program.

11. Comment: The Board requests that DNR provide the Board with any comments received at the public hearings specifically addressing any of the methods outlined below to which the DNR could consider in reducing the small business impact of this rule.

Comments related to:

1. The establishment of less stringent compliance or reporting requirements;
2. The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses;
3. The consolidation or simplification of compliance or reporting requirements for small business;
4. The establishment of performance standards for small businesses to replace design or operational standards required in the rule;
5. The allowance of a phasing-in period of compliance or tiered compliance approach for small businesses that are impacted by the rule.
6. Any options the DNR identifies for reducing the rule's regulatory impact on small entities may require further analysis and/or data collection to ensure that the options are practicable, enforceable, protective of public health, environmentally sound and are consistent with the requirements of the Regulatory Flexibility Act.

Response: The DNR completed a Small Business/Final Regulatory Flexibility Analysis to address the changes made in response to the public hearing comments. As part of that analysis, a separate "Fiscal Impact Report – Private Sector" has been prepared. The comments submitted by small businesses and the DNR response to those comments will be provided under separate cover.

V. Public Comments

A total of five hearings were held on ch. NR 243 at the following locations in late summer of 2005; Richland Center (August 15), Jefferson (August 17), Eau Claire (August 18), Wausau (August 22) and Green Bay (August 25). Public participation at the hearings is summarized in the table below.

Comments at the hearings generally reflected the written comments received during the public comment period which are discussed through the **"Response to Comments"** document.

| Hearing Location | Total attendance | Appearance slips | Oral Testimony | Support | Support w. Changes | Oppose | As Interest May Appear |
|------------------|------------------|------------------|----------------|-----------|--------------------|-----------|------------------------|
| Richland Center | 30 | 24 | 8 | 2 | 0 | 3 | 4 |
| Jefferson | 20 | 19 | 7 | 2 | 1 | 5 | 1 |
| Eau Claire | 14 | 12 | 6 | 4 | 1 | 3 | 2 |
| Wausau | 34 | 29 | 6 | 3 | 0 | 12 | 12 |
| Green Bay | 75 | 33 | 15 | 16 | 1 | 3 | 2 |
| Totals | 173 | 117 | 42 | 27 | 3 | 26 | 21 |

Based on input from producers and producer groups, the Department extended the public comment from September 9, 2005 to October 14, 2005. In addition to the comments received at hearings, the Department received 374 comment letters with a total of approximately 1200 individual comments regarding the rule.

A large number of comments were received that generally supported the rule revisions, although some preferred that the rules were more restrictive, and believed that the revisions were necessary to protect water quality. General support for some or all of NR 243 came from a number of environmental advocacy and conservation groups (e.g., Midwest Environmental Advocates representing over 15 advocacy groups and individuals, River Alliance of Wisconsin, Centerville CARES, Environmental Defense, The Wisconsin Wildlife Federation, Wisconsin Trout Unlimited) and individual citizens. General reasons for support included a desire to protect groundwater, fish and aquatic life, recreational opportunities, land values and human health, and concerns about the presence of manure in surface water and groundwater. Many comments expressed pride in Wisconsin's farming heritage and generally supported agriculture in the state of Wisconsin. Approximately 260 comments voiced concerns about impacts to water quality from improper manure handling, general support for rule requirements for winter spreading restrictions and liquid manure storage, and concern about general permits and allowances to stack manure outside of confined storage facilities. The Department also received a submittal from 25 members of the Wisconsin League of Conservation Voters expressing general support for the rule based on concerns about protecting Wisconsin's water resources.

The Department received many comments from individual producers, permitted and unpermitted, producer groups (e.g., Dairy Business Association, Midwest Food Processors Association, Wisconsin Federation of Cooperatives, Wisconsin Pork Association) and agronomists who work with livestock operations. These commenters generally spoke in opposition to the proposed rule conditions, particularly as related to duty to apply requirements, the continued use of the combined animal unit calculation, liquid storage requirements, restrictions on frozen or snow-covered ground, responsibility for manure distributed to other producers or individuals, and monitoring and inspection requirements.

Many producers and producer groups believed that the rule requirements are too costly and are overly prescriptive and onerous and would impede growth of the livestock sector in Wisconsin. Many believed that the revisions exceed the federal regulations and are not consistent with other state of Wisconsin rules and standards (e.g., Livestock Siting Rules-ATCP 51, ATCP 50 and NRCS Standard 590), particularly related to nutrient management requirements.

Some changes have been made in response to public comment. Responses to specific comments are contained throughout the **"Response to Comment"** document.

General

1. Comment: A number of comments were made requesting cost-sharing or in support of cost-share programs for producers.

Response: No change made. The Department has pushed for cost-sharing for implementation of agricultural best management practices. However, compliance with the requirements of NR 243 is not contingent on cost-sharing. The Department recognizes there will be costs associated with the proposed revisions to NR 243. The Department has attempted to minimize those costs while ensuring water quality protection.

2. Comment: A producer group representative submitted a redline/strikeout version of the proposed rule with recommended changes to NR 243.

Response: Some changes made. The Department made changes where the recommended revisions improved or provided clarification to the code.

3. Comment: Comments were received regarding concerns about how NR 243 interacts with local (town, county) requirements.

Response: No change made. Local requirements may be tied to NR 243 with respect to water quality by the Livestock Siting Rule (ATCP 51). Where possible, the Department has attempted to ensure that water quality-related restrictions are consistent with the Livestock Siting Rule. NR 243 permit requirements for water quality are expected to be equally, if not more, restrictive than ATCP 51. However, there may be non-water quality related requirements where ATCP 51 is more stringent than NR 243 (odor, employee training).

4. Comment: A number of comments requested that the Department do more to promote efforts such as composting, new technologies (separators, aeration, digesters, incinerators), and grazing.

Response: No change made. While producers may use any number of best management practices to comply with NR 243, those practices, including new technologies, are not dictated by NR 243. The rule could potentially provide incentives for new technologies under allowances for alternative discharge limitations (s. NR 243.13) as well as incentives under the Department's Green Tier program which encourages superior environmental performance.

5. Comment: There are some requirements in the permit that we do not agree on but we learn that it is for our own benefit. It is very important that we as producers and you as the department work together to keep agriculture a viable part of this state's economy and that the environment is taken care of.

Response: No change made. Thank you for your comment. The Department is committed to protection of water quality for all the citizens of Wisconsin and to keep agriculture a thriving business in Wisconsin. The Department has made it a priority to work with its regulated constituents in their efforts to seek viable solutions to protect water resources and will endeavor to do so in the future.

6. Comment: From what we understand, we would much rather keep the current relationship with the department than dealing direct with the EPA at a federal level.

Response: No change made. Thank you for the comment. In large part the proposed changes to the NR 243 are an important part of retaining the Department's delegation to implement the NPDES permit program in Wisconsin.

7. Comment: Many producer/producer group comments described the rule as overly prescriptive and preferred that operations were treated individually to account for the differences between operations and climate in the state rather than with a set of blanket rules. Some comments recommended that requirements should be based on a set of general performance or goals rather than prescriptive

requirements to allow for flexibility. An example would be a prohibition of discharge to streams, lakes, etc. Producers would then need to take whatever steps are necessary in their specific situation to adhere to this regulation.

Response: Some changes made. There remains a great deal of flexibility for producers within many of the restrictions in NR 243. For example, the Department has attempted to provide more flexibility for producers that wish to practice no-till farming by reducing reliance on injection and incorporation to avoid acute runoff issues (see SWQMA restrictions – s. NR 243.14(4)). In addition, the Department has modified phosphorus requirements in response to comments to allow permittees flexibility in implementing different methods of minimizing phosphorus delivery to surface waters from fields (s. NR 243.14(5)). However, while the Department recognizes the issue of flexibility, the Department also recognizes the concerns of producers and the public for consistent implementation of regulations, which is difficult with general performance goals. One of the goals of the revisions to NR 243, and one of the requirements of the federal rule revisions, was to more clearly outline expected best management practices to better protect water quality, avoid inconsistent implementation of NR 243 and create a more level regulatory playing field.

8. Comment: A number of commenters recognized the issues associated with CAFOs and runoff but were not sure if the code addressed the problems correctly.

Response: No change made. In many respects, the revisions to NR 243 set a minimum level of expectation in terms of best management practice implementation. Many of the requirements in NR 243 are based on what many producers are already doing (up to 80% of operations already have 180-day liquid manure storage, many operations already avoid surface applications of liquid manure on frozen or snow-covered ground). It is expected that some producers may need to exceed the proposed best management practices (e.g., some operations may need more than 180-days of storage). In many areas, the code provides flexibility the code in implementing new or alternative practices.

9. Comment: Some comments expressed concern about how the proposed rule will impact operations as it relates to other rules such as odors and air emissions or county or town requirements. A comment stated that one agency must not put an operation into violation of an other agency's rules.

Response: No change made. Based on the Department's understanding of the Livestock Siting Rule, it is expected that many operations will be able to address air and odor issues using best management practices. However, there may be future EPA and state air or odor regulations that could impact permitted operations. To the maximum extent possible, the Department has tried to create a rule in NR 243 that is based on what many producers are already doing to address manure management issues at their operations. In addition, it is expected the implementation of new technologies (solids separation, digestion) may help to address some of these issues.

10. Comment: The Department received a number of positive comments from producers, producer groups, public citizens and environmental advocacy and conservation groups for its efforts during the NR 243 rule revision process. Comments were received thanking the Department for efforts to educate producers about the code revisions and for the extension of the comment period on the rule to October 14, 2005. Many groups indicated a desire and need to work together with the Department on water quality issues and revisions to NR 243.

Response: No change made. The Department appreciates the recognition of its efforts on NR 243 and hopes to continue its partnership with all stakeholder groups.

11. Comment: Some producer groups commented that USEPA is in the process of revising its CAFO rules to conform to the holdings in the *Waterkeeper* case. USEPA expects to publish the proposed new rule in November or December 2005 and, following a comment period, finalize the rule in the summer of 2006. WDNR should hold NR 243 and conform it to the revised federal rule to be developed as a result of this process.

Response: No change made. The Department believes it is necessary to move forward with revisions to NR 243. Much of the federal CAFO rule revision was upheld by the *Waterkeeper* case (e.g., phosphorus based nutrient management planning, restrictions on the timing of manure applications, requirements for adequate storage). The Department has drafted revisions to NR 243 taking into account the *Waterkeeper* decision in order to reduce or eliminate the impacts of future federal CAFO rule revisions. Any decision on the need to further revise NR 243 would be made at the time of the finalization of any changes at the federal level.

12. Comment: A number of producers and producer groups commented that revisions to NR 243 should be consistent with other federal and state rules and standards, particularly, Livestock Siting Rules (ATCP 51) nutrient management requirements (ATCP 50 and NRCS Standard 590), perhaps even waiting until Livestock Siting Rules were in place. They encouraged the Department to work with DATCP to avoid conflicts among NR 243, NRCS 590, ATCP 50 and ATCP 51. This concern was also expressed in comments from State Representatives Al Ott and Scott Gunderson. For example, a number of producers groups and producer object to the proposed rule's nutrient management provisions that go beyond those practices in the updated version of 590. One producer group commented that the Department should trust in the Standards Oversight Council (SOC) process and not supplant its judgment for the expertise of SOC in the context of technical standard development. Another producer group recommended that the Department should reference ATCP 50's nutrient management requirements.

Producers/producer groups commented that if there is inconsistency among different programs, there is increased complexity and confusion and an associated risk of inadvertent permit violations. Many contend that consistency will increase compliance. In addition, failure to be consistent with federal rules will put Wisconsin producers at an economic disadvantage

Response: Partial change made. The Department has worked with its partners at the state and federal level to ensure consistency between the various state and federal regulatory and voluntary programs that impact agriculture to the maximum extent possible where those programs address the unique water quality impacts associated with large CAFOs. For example, many of the key agronomic elements of NRCS Standard 590 have been incorporated into NR 243 (e.g., crop nutrient need, soil sampling) and application restrictions are the same. However, NRCS Standards serve primarily as the basis for receiving federal voluntary cost-share funding. While NRCS Standards generally address many potential water quality impacts associated with manure applications, especially for operations with fewer than 1000 Animal Units, they often do not go far enough to address federal CAFO rule requirements nor do they go far enough ensure that water quality standards are met when dealing with some to the unique issues associated with operations the size of large CAFOs. For example, NRCS Standard 590 is primarily a nutrient management standard with water quality protection of lesser emphasis. Department staff participated in the revisions to NRCS Standard 590 and during the process pointed to areas where the standard would need to be revised or added to in order to address federal CAFO nutrient management requirements or to insure water quality is protected under NR 243.

Department staff also recognized that resources and level of oversight and the expectation of performance vary greatly between smaller and larger-scale operation and these factors are expressed in the regulation of large CAFOs as part of the NPDES/MPDES permit program. While the Department continues to support the NRCS Standards and other state voluntary and regulatory programs, we believe the additional restrictions in NR 243 are warranted and necessary when addressing the unique potential water quality impacts associated with CAFOs.

13. Comment: Revisions that result in an increase in the time and number of review are not acceptable.

Response: See response to comment #2., section III.

14. Comment: A number of producers and producer groups indicated concerns about the impacts the proposed rules will have on the livestock industry in the state of Wisconsin. Commenters indicated that the livestock industry is crucial to the state of Wisconsin and that the rules are too costly and could have a significant economic impact on the state by impeding or stopping the growth of the livestock industry and

associated industries (e.g., cheese making). A comment indicated that more money spent on regulation means less money will be spent on innovation. A producer consultant submitted three case studies of dairy operations which will or could be impacted by the revisions, and outlined potential costs to the operations resulting from revisions.

Other individual citizens and conservation and advocacy groups commented that the rules were not too expensive. One comment referenced the fact that municipalities and industries have spent \$3 billion dollars on water quality protection. One comment stated that additional regulations are needed because minimal regulation is often used to protect the bottom line; not human health. A producer commented that he is not sure if the dairy industry will be sacrificed because the EPA will not allow improper operation in any state. An environmental advocacy group expressed concern about the numerous concessions the DNR has already made to interests supporting industrial agriculture in Wisconsin and submitted a number of specific comments to prevent further weakening of the DNR's proposed revisions.

Response: Some changes made. The Department recognizes the importance of the livestock industry to the state of Wisconsin. The Department has made a number of changes to address potential economic impacts to the livestock sector. One example of this effort is the revision to the method in how animal units are calculated. These changes will result in an additional 10-15 operations being defined as a CAFO compared to the over 300 operations some producer groups indicated would become CAFOs. In general, the Department believes it has created a rule that balances the need to protect water quality and ensure that the livestock industry remains strong in this state.

The Department has analyzed costs associated with the proposed revisions and believes that they are generally consistent with the costs submitted by the producer consultant mentioned in the comment. In general, the Department believes that the submitted costs were higher than would be expected, especially as it relates to runoff control systems. Under current federal and state CAFO rules, operations of the size provided as examples (medium CAFOs) with discharges to navigable waters from feed storage areas and exposed feedlots/barnyards, are required to address these discharges or apply for WPDES permits. It is possible that these operations would already be required or have already installed the necessary controls to avoid discharges to navigable waters. In addition, it should be noted that one of the three potentially impacted operations would no longer be impacted based on revisions to the public noticed version of the rule.

15. Comment: A number of producers and producer groups commented that the Department's proposed rule is inconsistent or exceeds federal CAFO requirements. These comments indicated that this will result in confusion and competitive disadvantages for Wisconsin's livestock industry. One producer group referenced a concern that Wisconsin will be a regulatory island as a result. The group stated that the proposed rule revisions are contrary to Governor Doyle's Grow Wisconsin Initiative, creating regulatory barriers via administrative rules that put Wisconsin producers on an unfair and uneven playing field. The group also referenced s. 283.11(2)(a), Stats, that requires that all rules promulgated by the Department related to point source discharges, **comply with and not exceed** federal rules and requirements. Areas where this is a particular concern include:

- Requiring large concentrated animal feeding operations to apply for a permit when there is no actual discharge of pollutants from the production area of the facility;
- Exceeding the inspection, monitoring and recordkeeping requirements of the federal rule;
- Mandating a minimum of six month's storage capacity for liquid manure; and,
- Requiring CAFOs to develop a nutrient management plans for CAFO manure applied to lands the CAFOs neither own nor control.

Response: The Department believes CAFOs can operate profitably and manage manure and process wastewater in accordance with the revisions to NR 243 and in a manner that protects Wisconsin's waters. The Department disagrees that DNR's proposed regulations will make Wisconsin a regulatory island. Many states in US EPA Region V have retained the duty to apply for all large operations over 1000 animal units and many have adopted regulations that are more stringent than the federal regulations (see bullets below regarding comparisons to other states). Like the WDNR, many states in Region V have

adopted more stringent regulations because they recognize that "one federal regulation doesn't fit all states" and the federal regulations aren't necessarily adequate to protect water quality.

As for Wisconsin laws, the Department may be more stringent than federal regulations in some areas. For example, regulations for CAFOs may be more stringent when necessary to meet water quality standards and to protect groundwater. Under Wis. Stat. ss. 283.01 and 283.31, Wisconsin's WPDES permit program is required address discharges to groundwater and to establish requirements that comply with state water quality standards. Furthermore, in Maple Leaf Farms v. DNR, 2001 WI App 170, 247 Wis. 2d 96, 633 N.W. 2d 720, the court explained the scope of stringency provisions in s. 283.11(2)(a). Specifically, the court stated that uniformity provision arguments based on the language of Wis. Stats. 283.11(2)(a) are only compelling "where the EPA imposes specific discharge limits from defined categories of pollution sources", and such arguments will not have the force of limiting the Department's authority where the EPA has chosen not to regulate in a specific area or "where the permit conditions involve not effluent limitations per se but rather preventive environmental practices, including maintenance of a manure management plan, a daily log and an annual spreading report." Maple Leaf Farms, 2001 WI App at ¶ 20.

The Court reasoned correctly that the Department can't be limited from imposing more stringent requirements if the EPA had not set parallel requirements in the first place. In order for a Wisconsin court to apply the uniformity provision after Maple Leaf Farms, a party will need to be able to point to a categorical standard or limitation covered in Wis. Stat. 283.11(2)(a) that has been set by the federal government, and upon which the State of Wisconsin is attempting to apply a more stringent standard or limitation.

In essence, what the Maple Leaf Farms case achieved was to clarify that the uniformity provision doesn't place a broad obligation upon the State to blindly imitate federal water pollution control standards. Instead, the provision establishes certain narrow circumstances under which the Department may not impose more stringent limitations than those set by the federal government. The uniformity provision has a useful purpose, but if we extend its application beyond the scope intended by the Legislature we would frustrate the provisions' purpose and threaten Wisconsin's autonomy in protecting the waters of the State.

Other states:

- Duty to apply: Minnesota and Michigan have retained an automatic duty to apply for CAFOs. Indiana and Michigan have retained a duty to apply based on potential to discharge.
- Mixed animal units: Minnesota and Iowa have retained a combined animal unit calculation
- Adequate storage: DNR does not believe there is any validity to the argument that the proposed regulations are more stringent than federal regulations because EPA has given states the flexibility to develop their own definitions of adequate storage (the proposed federal regulations do not give a specific definition of adequate storage). However, simply for purposes of comparison other states have required liquid storage capacity as follows: Illinois-120 to 270 days, Indiana-180 days, Michigan-180 days, Minnesota-270 days, Ohio-120-180 days
- Transfer of manure: In Iowa, CAFOs retain responsibility for all manure, except for dry poultry manure that is sold as a product.

16. Comment: A producer group requested that the Department prepare a comparison between the cost of compliance with NR 243 (as proposed) and the costs of complying with similar NPDES implementation rules in border states, including Illinois, Iowa, Minnesota and Michigan.

Response: While the Department has not completed an analysis of the cost of compliance with NR 243 compared to border states, it has included a private sector impact report outlining the cost of the proposed revisions for the Wisconsin producers. In addition, the Department has outlined regulations in neighboring states as part of the rule analysis contained the Green Sheet package for NR 243 adoption.

17. Comment: A number of commenters indicated concerns about the presence of CAFOs in the state of Wisconsin and believed that there should be a moratorium on CAFOs or a cap on the number of CAFOs allowed in the state and encourage product prices that support small operations.

Response: No change made. The Department works to ensure protection of water resources regardless of the size of operation. The Department has no authority to cap, stop CAFO expansions or address the prices farmers obtain for their products.

18. Comment: There needs to be adequate funding of the nonpoint source rules.

Response: No change made. The Department has been working with its partners to promote proper funding for implementation of agricultural performance standards under NR 151.

19. Comment: CAFO Owners should live within 500 feet of their operation.

Response: No change made. The Department does not have authority to address this issue.

20. Comment: The Department should lower the permit threshold from 1000 to 700 animal units.

Response: The Department believes that other regulatory and voluntary programs are in place to address impacts from animal feeding operations with fewer than 1000 animal units. Where warranted and in a limited number of circumstances, the Department has the ability to designate operations with fewer than 1000 animal units as a CAFO on a case-by-case basis. Other alternatives are available as well.

21. Comment: A number of producers and producer group representatives expressed a concern that the Department needs to work with producers.

Response: Partial change made. Throughout the NR 243 code revision process the Department has engaged producer groups. The Technical Advisory Committee (which contained producers, producer group representatives, and agency staff that worked with producers), met 14 times over a period of 18 months and provided excellent input into the rule revision process. In addition, the Department held five hearings throughout the state and an additional eight informational sessions to facilitate producer input into the process. In order to provide additional time for affected groups to become informed about NR 243 and provide us with comments, the Department extended the comment period from September 9th to October 14th.

The Department has considered all comments received by producers and their representatives and has made a number of modifications to the proposed rule in response to those comments. The Department looks forward to working with all stakeholders to address impacts from livestock operations of all size.

22. Comment: Producers and producer group representatives expressed concerns that the proposed revisions to NR 243 are not needed because they focus on farmers that are already in compliance. Comments indicated that CAFOs do a good job as environmental stewards and are more likely to comply with regulations than smaller-scale farms. Concerns were expressed that the rules were penalizing all CAFOs because of the acts of a few bad actors.

Response: No change made. The Department recognizes that many larger-scale producers are already implementing many of the practices proposed in revisions to NR 243. For these producers, the rule revisions will not significantly impact their operations. However, the rule revisions are needed to ensure that all CAFOs are performing at the same level. There is a water quality benefit to revising NR 243 to reflect what many producers are already doing to provide a level regulatory playing for all producers and to ensure improved implementation of best management practices. In addition, most of the revisions to NR 243 are a direct response to revisions to federal CAFO rules which the Department must reflect in NR 243 in order to maintain delegation to implement the NPDES permit program for CAFOs.

23. Comment: A number of producers, producer groups, members of the public and environmental advocacy and conservation groups express concerns that not enough is being done to address impacts from farmers of all sizes, especially farmers with fewer than 1000 AU, that are not in compliance with

state rules. CAFO operators indicated concerns about equal treatment compared to smaller-scale operations and the need for one set of consistent nutrient management rules to follow. The land and the resource do not care if the manure is being generated from a large CAFO or not. Environmental advocacy groups supported efforts to permit operations with fewer than 1000 animal units. For example, one group recommended that proposed s. NR 243.26(1) and (2) be amended to require WPDES permits for all medium size and smaller CAFOs that discharge to groundwater in addition to navigable waters.

Response: Partial change made. The Department recognizes that operations with fewer than 1000 animal units also impact water quality. The Department will not require permit coverage for every medium and small farm in the state. The Department has proposed a change that states that if a medium-sized or small-sized farm causes the fecal contamination of a water supply well, then the Department may require WPDES permit coverage for that operation – see change to s. NR 243.26. The Department has clear authority to address impacts from operations with 1000 animal units or greater under the NPDES/WPDES permit program; however, there are a number of federal, state and local regulatory and voluntary programs that are designed to address impacts from smaller-scale operations, in addition to the WPDES permit program.

24. Comment: Comments were received indicating that other sources of water pollution (e.g., runoff from urban areas) should be addressed in addition to farms.

Response: No change made. Pollution from urban areas is addressed under NR 151, NR 216 and other point sources covered under the WPDES permit program. It should be noted that greater than 5,000 non-agricultural industries are regulated under these rules. Fewer than 160 livestock operations are currently regulated under NR 243.

25. Comment: Many producers and producer group representatives commented on the need for more farmer education to avoid water quality impacts.

Response: No change made. The Department agrees that more farmer education is needed and supports those efforts.

26. Comment: A number of producers and producer group representatives requested that the Department base its rules on science and common sense. In particular, a number of comments stated that the Department should work closely with Discovery Farms to incorporate the results of the project's applied research. Additional comments indicated that additional research from Discover Farms and the Pioneer Farm in Platteville is needed. These groups and an environmental advocacy group supported Department coordination with Discovery Farms and utilization of data promptly as it is developed.

Response: No change made. The Department has and will continue to support the efforts of the Discovery Farms. Some restrictions included in the rule are based on information available from Discovery Farms and are designed to address field conditions regardless of the time of year (e.g., setbacks, limitations on loading rates for application on frozen/snow-covered ground). In addition, restrictions have been included that are designed to address when these conditions are most likely to result in impacts to water quality ("high-risk winter period") which is also based on Discovery Farms data.

Based on the comments received, the Department has attempted create a rule based on common sense and science that balances federal CAFO rule requirements, state water quality protection concerns and accepted agricultural best management practices. As additional data becomes available, that data will be considered as part of the WPDES permit program for CAFOs.

28. Comment: A number of producers commented that the Department should only regulate CAFO production areas and not land application activities. Comments indicated that CAFO land application activities are more appropriately regulated as a nonpoint source of pollution.

Response: No change made. The Department has historically regulated CAFO land application activities as part of the WPDES permit program in order to ensure that waters of the state, including

groundwater, are protected. The federal *Waterkeeper* decision has upheld the NPDES permit programs authority to regulate CAFO land application activities.

NR 243.03 - Definitions

29. Comment: Ancillary Service and Storage Areas - These areas are adjacent to but not a part of the production area and are defined to include raw material storage areas and the like.

Response: No change made. It is correct that ancillary service and storage areas are not part of the production area. Ancillary service and storage areas do not, however, include raw material storage areas because under the federal regulations, raw material storage areas are part of the production area. These definitions are consistent with federal regulations.

30. Comment: Animal Feeding Operation – A comment suggested changes to the definition of animal feeding operation.

Response: No change made. This suggested change to the definition of animal feeding operation is not consistent with federal regulations.

31. Comment: Conduit to Navigable Water – A producer group comment suggested that the definition is overly broad and unreasonable as applied and, in particular, as applied to Surface Water Quality Management Area (SWQMA). A conduit to a navigable water should be defined as limited to those features that have a direct connection via channelized flow to navigable water. Including indirect connections and tiled fields within this definition would make potentially every acre in Wisconsin, other than those entirely internally drained fields, defined to be a "conduit to navigable water." Other producers also urged the removal of tiled fields from the definitions of conduit to navigable waters. Comments indicated concerns that an expansive definition of conduit to navigable waters would unjustifiably eliminate a large amount of cropland from receiving nutrients.

A number of comments were also received from individual citizens and environmental advocacy groups in support of including tiled fields in the definition of "conduits to navigable water."

Response: Partial change made. The Department has added a note to the rule clarifying the status of subsurface drainage systems. The Department's definition of "conduit to navigable water" addresses those areas that meet the federal rule and that serve as direct connections via channelized flow. Except for those features present at the surface in fields (open tile line intake structures), subsurface drainage systems (drain tiles) are not included in the definition. It should be noted that the SWQMA restrictions do not prohibit application of manure or other nutrients near these conduits and flexibility is allowed in the rule to address other practices than those specifically identified in the code.

32. Comment: The Department should define the term "discharge."

Response: Discharges are defined in a number of ways within the context of the rule, primarily as the means by which pollutants associated with manure and process wastewater reach waters of the state.

33. Comment: Define frozen ground as soil that is frozen such that manure cannot be properly incorporated or injected.

Response: The Department had originally attempted to define frozen ground in the manner indicated above. However, the Department found that by tying a restriction on applications on frozen ground to the capability that manure could be properly incorporated or injected was circular logic and did not provide for implementation of appropriate practices.

34. Comment: Commenters expressed concern that the definition of frozen ground may have unintended consequences including decreasing the window for surface application of liquid manure in the fall and early winter of the year (late October - December). For farms using no-till farming systems, this will require either additional storage or force producers to quit spreading in the early winter and

anticipates favorable spreading conditions in the spring. Applications should be encouraged, not frustrated to spread in the late fall (Nov - Dec) and even into January depending on weather and soil conditions, in part because of potential water quality issues associated with applying manure in the spring.

Response: The proposed rule does allow surface applications of solid manure on frozen or snow-covered ground in the fall and winter, except for the months of February and March. While the Department agrees that applying manure in late fall may be beneficial to avoid potential compaction and runoff issues in the spring, it does not make surface applying liquid manure on frozen or snow-covered ground conditions in the fall any less risky. Other comments have indicated that it is important to identify weather and soil conditions under which it can easily be predicted that runoff will occur. While the Department agrees that it is important to identify these conditions, the Department also believes it is important to identify conditions and practices that will avoid impacts associated with conditions that are not easily predicted, such as those conditions resulting from the unpredictable nature of weather. Rains could occur in the late fall within days of liquid manure being surface-applied on frozen or snow-covered ground and cause water quality impacts. There may be situations where no-till farming, liquid handling systems and weather conditions may necessitate additional storage or more intense planning efforts to avoid potential water quality impacts. The Department is requiring six months of storage because it is a level of storage that most CAFOs have already achieved and provides the minimum amount of storage that is likely to be required to avoid impacts associated with applications on frozen or snow-covered ground. The Department recognizes that some operations may choose or need to build more than six months to balance winter spreading restrictions with nutrient management, soil conservation efforts and individual preferences. If an operation chooses to have the minimum amount of storage required, it is possible that the operation will need to identify fields where manure can be injected or incorporated without exceeding tolerable soil loss in order to avoid acute impacts associated with surface applications of liquid manure in the winter.

35. Comment: A comment noted that based on the definition of frozen ground in NR 243, farmers are actually planting corn in frozen ground in April.

Response: Defining a condition of frozen ground based on when it is appropriate to plant a crop as opposed to when it is appropriate to surface apply manure in order to avoid runoff, are two very different things. Corn seeds and manure are two very different materials that are far removed from each other in terms of potential to impact water quality under the conditions described in the definition of frozen ground in NR 243.

36. Comment: The definition of "karst feature" is too narrow and should be replaced with the definition of "direct conduits to groundwater" in NRCS Standard 590.

Response: Change made.

37. Comment: The definition of navigability is problematic.

Response: Changes to the definition of "navigable waters" cannot be addressed through revisions to NR 243

38. Comment: New source CAFO means any of the following: The reference to "ANY" of the criteria in the definition of new source CAFO should be replaced by "ALL" as it was discussed during NR 243 Technical Advisory Committee meetings.

Response: No change made. In accordance with federal law, a new source CAFO is an operation that meets any of the criteria outlined in the definition of "new source CAFO."

39. Comment: Non-Liquid poultry manure handling. - The Department needs to add the Belt Battery cage system of manure handling to this definition.

Response: Partial change made. The definition has been deleted.

40. Comments: Liquid poultry manure handling system – The definition currently includes stacked or piled manure that is exposed to rainfall. The rule needs to be clarified to indicate that headland stacking is part of a non-liquid system.

Response: Partial change made. The definition has been deleted.

41. Comment: Reviewable Facility or System - Feed and other raw material or storage areas which are not part of the production area generating manure or other process wastewaters should not be the subject of this rule, but rather should be handled pursuant to the stormwater program and NR 216 as discharges associated with industrial activities.

Response: No change made. Under 40 CFR 122.23(b)(8), the definition of production area includes feed storage areas and other raw materials storage areas. Specifically, the definition states, "*Production area* means that part of an AFO that includes the animal confinement area, the manure storage area, the **raw materials storage area**, and... The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials..." {emphasis added}. Also see 40 CFR 412.2(h). Under federal regulations, the production area must be subject to these requirements – see 40 CFR part 122 and 412.

42. Comment: A number of comments wanted changes made to the definition of "solid manure," especially in light of the fact that the code has different requirements for solid manure depending on the percent solids of the manure.

Response: No change made. The definition of solid manure is primarily used to differentiate between land application restrictions related to frozen or snow-covered ground for solid and liquid manure. Other sections of the code use percent solids as the basis for additional restrictions related to other manure handling activities (e.g., manure stacking).

Agricultural Stormwater

43. Comment: Some comments were received in support of the requirement in NR 243.14 that manure shall not pond on runoff the application site. One commenter viewed the agricultural stormwater exemption as a huge loop hole for potential medium CAFO's to move the manure offsite to a site that can cause problems.

A producer group commented that the provision for allowing discharges of agricultural stormwater not subject to the WPDES permit program is in conflict with the provision (i.e., NR 243.14(2)(b)) that provides that manure may not pond or runoff the application site at any time.

A producer group suggested changing s. NR 243.14(2)(b)1 to clarify that manure or processed wastewater may not pond on or run off the application site or otherwise leave the field "at the time of application" in order to give meaning to the agricultural stormwater exemption and to be consistent with the federal program. Without a clarification the agricultural stormwater exemption in proposed s. NR 243.14(2)(a) is circular and ineffective.

This comment was mirrored in a number of producer comments expressing concern that farmers shouldn't be held accountable for an act of God, or unpredictable weather. One commenter questioned, "What if we get a 20" rain?" Another producer recommended that the requirement that manure and process wastewater may not pond on or run off the application site or leave the field via subsurface drains should only apply during a limited period surrounding the application time (within a 12 hour period of application).

Response: Partial change made. The Department has proposed a revision to the restriction that manure and process wastewater may not runoff the site at any time. Specifically, the revised definition of "agricultural stormwater," when considered with the revisions to s. NR 243.14(2)(b), allows runoff to

surface waters from land application areas when the runoff is associated with a 25 year, 24 hour storm event and where the permittee has complied with chapter NR 243 and the permit. Merely moving manure off-site does not qualify as a discharge of "agricultural stormwater."

44. Comment: A comment expressed concern that enforcement of the manure management rule is focused on manure and not on the chemical components of manure. The proposed rule seems to indicate that the components of manure may be the regulatory target. If manure is discharged, there should be the prescribed enforcement, but the enforcement should not go to the level of the components of manure as it is impossible to correctly assess the source of any possible contamination in a watershed (e.g., phosphorus from tree leaves versus manure).

Response: No change made. Federal and state regulations are intended to address both the materials that are the source of pollutants (manure and process) as well as the components of those materials (phosphorus, nitrogen, BOD, pathogens, etc.).

NR 243.11 – Large CAFOs

45. Comment: A producer group suggests that revisions are included that secure the concept of a permit application shield following application for a WPDES permit but before the Department issues the permit. The comment further suggests that this application shield is important given current Department staffing and workloads. The State has granted broad authorization to the Department to establish and administer the WPDES program. See, e.g., *Maple Leaf Farms v. DNR*, 247 Wis. 2d 96 (Wis. App. 2001), S. 283.37(1), Stats., and s. NR 200.10 that provide authority for such an approach by the Department. This comment must be combined with other comments (applicable to the definition of Animal Feeding Operation) that only large CAFOs that have an actual discharge of pollutants have a duty to apply for a WPDES permit.

Response: Under federal and state laws, a point source, including a CAFO may not discharge to waters of the state without a WPDES permit. The department is not aware of any allowance under state or federal law for a "permit shield" for a discharge to navigable water where a CAFO simply has a pending WPDES permit application, but no permit. See Wis. Stat. s. 283.31(1), 33 USC 1311(a), 40 CFR 122.23(d)(5), 40 CFR 122.3. Note: Under federal law there is a "shield" in 33 USC 1342(k) for discharges covered by and in compliance with a NPDES permit.

46. Comment: A large number of producers and producer groups commented in opposition of the continued use of the mixed animal unit (AU) calculation and supported the use of the individual animal unit calculation required under federal law. Opposition to the mixed AU calculation centered around the fact that it exceeds federal requirements, it will increase the number of permitted operations (potentially over 300 new broiler and dairy CAFOs) which will negatively impact growth of the livestock industry as well as tax limited Department resources to address the additional permit workload.

A number of environmental advocacy and conservation groups and individual citizens support the DNR's retention of the mixed animal unit calculation. Reasons for support included maintaining regulatory authority over existing CAFOs in Wisconsin, its consistent with current NR 243, it makes common sense in comparison to the federal method given that manure is manure. Loss of this authority would significantly harm surface waters and groundwater. A number of advocacy and conservation groups commented that many CAFOs in Wisconsin still have different types of livestock, making the mixed animal unit calculation a more appropriate tool for managing the different types of manure generated by CAFOs.

Response: Partial change made. The Department has modified the proposed rule to include the same combined or "mixed" animal unit (AU) calculation that is required under the current NR 243 (i.e., one that does not use the more restrictive federal animal unit equivalencies). In addition, the Department has included an individual animal unit calculation (one that doesn't add animal types together at an operation) using the more restrictive federal animal unit equivalencies. Maintaining the current mixed animal unit calculation will avoid a rollback of regulations that have been in effect for over 20 years and ensure that operations will be regulated more equitably. Unlike other parts of the country that have seen

specialization in raising individual animal types, Wisconsin continues to have mixed-animal type operations. Without the mixed animal unit calculation, under the federal individual animal type calculation an operation that has 999 AUs of milking cows and 999 AUs of heifers, would not be required to obtain a WPDES permit while an operation with 1000 AUs of milking cows would be required to obtain a permit.

As for the statement that the Department's proposed rules cannot be more stringent, in accordance with state law, Wisconsin can have regulations that define point sources differently than federal regulations.

47. Comment: One comment recommended revising the animal unit calculation to insure that the calculation accurately reflects the actual weight of animal present on an operation as opposed to the less precise EPA animal unit methodology.

Response: Partial change made. The Department has proposed to continue to use the equivalency numbers in the current version of NR 243 for the mixed animal unit calculation. In compliance with the federal law, the federal animal unit numbers will only be used in the individual animal unit calculation.

48. Comment: A producer didn't understand the need for s. NR 243.11(4) and questions the Department for including it. An operation is either a CAFO based on having over 1000 animal units or due to a discharge event. What is the purpose of this section?

Response: There have been several instances where the department has received complaints regarding an operation that has alleged the operation has 900-999 animal units. In addition, there are times when an operation has submitted an application indicating it has between 900-999 animal units where it appears that the operation is, in fact, above the 1000 animal unit threshold. In response to these issues, the Department may need to obtain additional information to verify the size of the operation and avoid potential violations.

NR 243.12 – WDPES permit application requirements

49. Comment: A producer group supported the proposed application requirements, subject to issues associated with the duty to apply, although some producers/producer groups opposed the 12 month application time-period. Some comments indicated that requirement to apply for a WPDES permit 12 months in advance is an unreasonable time requirement when purchasing a new farm.

Response: Partial change made. The Department believes that the proposed 12 month/6month application requirements provide benefits to the Department and producer alike in terms of preparing for potential regulations that could impact expansions. However, the Department recognizes the need to address purchases of nearby operations. In accordance with federal law, s. NR 243.12(1)(c) has been created to allow operations that become a CAFO as a result of purchasing another operation up to 90 days to apply for a permit. For concerns regarding duty to apply issues, see response to comment #50 of this section.

Duty to apply

50. Comment: A number of producers and producer groups commented in opposition of the duty to apply for all CAFOs in the proposed code. In particular, comments referenced the *Waterkeeper* decision that vacated USEPA's requirement that CAFOs with a "potential to discharge" had a duty to apply for a National Pollutant Discharge Elimination System ("NPDES") permit. A producer group indicated that USEPA has indicated its response to the *Waterkeeper* case will be to clarify that only CAFOs that actually have a discharge from the production area of the operation have a duty to apply for an NPDES permit. Therefore, the Department's duty to apply requirement conflicts with s. 283.11(2)(a), Stats., and the Legislature's position that Wisconsin CAFO rules be no more stringent than those developed by the federal program. Therefore, the Department should only require operations to apply for a permit when there is a determination of an actual discharge of pollutants to waters of the state. Comments also strongly objected to the explanatory note beneath s. NR 243.12(1)(c) stating that all CAFOs that land apply manure have discharges to groundwater. A producer group commented that this would mean the Department would have jurisdiction over all 16,000 dairy farms in Wisconsin under the WPDES permit

program and thus would exceed the Department's authority. Others commented that they did not believe that all land application activities resulted in discharges to groundwater.

A number of environmental advocacy and conservation groups and individual citizens supported the duty to apply requirements in the public notice version of s. NR 243.12(1). An advocacy group commented that it is clear that the DNR has the authority and obligation under state law to continue to require WPDES permits for all large CAFOs, despite the *Waterkeeper* decision since the DNR must ensure compliance with groundwater standards, as water quality standards, in issuing WPDES permits. The group and others referenced 30 private well contamination events in 2004 and 2005 to demonstrate that discharges of manure to groundwater will occur from land application areas. The group referenced court decisions that have upheld the DNR's authority to regulate discharges to groundwater from land application of manure by CAFOs through the WPDES permit program. *Maple Leaf Farms, Inc. v. DNR*, 2001. Further, the advocacy group stated that the court decision made clear that the DNR had the authority to regulate off-site manure spreading activities by a CAFO to prevent discharges of manure to groundwater and surface water.

Another commenter believed that if an "Agricultural Stormwater" event is likely to occur such as snow melt or a significant rainfall, then the operator should be subject to the WPDES permit if land applications result in a discharge to waters of the state.

Response: Some changes to rule made. Under ch. 283, Stats., all discharges to waters of the state, including groundwater require a WPDES permit. The Department believes that current science supports that all manure or process wastewater storage systems leak some pollutants to groundwater and that land application of manure or process wastewater will result in a discharge of pollutants to groundwater. Studies such as "Agrochemical Leaching From Sub-Optimal, Optimal and Excessive Manure-N Fertilization of Corn Agroecosystems-Final Report" (Norman/Masarik, 2001-2003) and "Crop Management and Corn Nitrogen Rate Effects on Nitrate Leaching" (Andraski/Bundy/Brye, 2000), point to the leaching of nitrates from land application systems. In addition, clay lined storage structures have a designed leakage rates (maximum permeability rate of 1×10^{-7} cm/sec and a specific discharge limit of 500 gallons/acre/day (NRCS Standard 313, December 2005)) and other structures have discharges associated with small structural defects (e.g., hairline cracks in concrete storage facilities, minor leakage at seams of synthetic liners) that, while not necessarily violations of water quality standards, do result in discharges of pollutants to groundwater. Therefore, all large CAFOs that land apply manure or process wastewater or that have storage structures at or below grade have actual discharges to groundwater, and in most cases surface waters, so consequently all large CAFOs shall apply for a WPDES permit because they have actual discharges to waters of the state. The Department's proposed rules are consistent with the *Waterkeeper* case and the rules comply with Wis. Stat. §§ 283.001, 283.01 (12) and (20), 283.11 and 283.31 and the decision in *Maple Leaf Farms v. DNR*, 2001 WI App 170, 247 Wis. 2d 96, 633 N.W. 2d 720. In *Maple Leaf Dairy vs. DNR*, Court of Appeals upheld the DNR's authority to regulate discharges to groundwater from land application of manure by CAFOs through the WPDES permit program. In addition, the court found that DNR had the authority to regulate off-site manure spreading activities by a CAFO to protect groundwater and surface waters.

(Note: The Department also disagrees that the *Waterkeeper* decision limited the duty to apply to the production area discharges. At the federal level, except for agricultural stormwater discharges, actual discharges from the land application areas are also a basis for requiring permit coverage (also see discussion of agricultural stormwater discharges))

Medium and Small Size Farms: The Department has not, however, used these same factors for requiring a WPDES permit for medium or small sized animal feeding operations, and the Department's rule does not propose to issue permits to all 16,000 dairy operations in the state based on groundwater discharges. In general, the rule states that for medium and small farms, a WPDES permit is required for discharges to navigable waters, and the Department may require WPDES permit coverage in cases where a small or medium size farm has had a discharge that contaminated a water supply well. In most cases, other state regulatory and voluntary programs exist to address discharges to groundwater from medium and small size farms.

No potential to discharge

51. Comment: A number of producers supported the allowance for a "no potential to discharge determination." A producer group supported this provision, but noted that should the Department revise the rule to be consistent with the mandates of both the *Waterkeeper* case and ch. 283 of the Wisconsin Statutes, this provision is no longer needed because only those large CAFOs with an actual discharge will have a duty to apply for WPDES permits. The group also commented that Department staff has said in public that Department staff will never utilize this provision.

An environmental advocacy group objected to the "no potential to discharge" allowance in light of DNR's finding that all CAFO's discharge manure and nutrients to groundwater and surface waters from land application areas.

Response: Change made. The Department has deleted the no potential to discharge section – also see version of duty to apply). In addition, while Department staff has indicated that under the public noticed change of the code that it would likely be very difficult to demonstrate "no potential to discharge," staff have not said it would never be used. Statements have been made that any allowance for "no potential to discharge" is far more likely in arid parts of the country. Given the extent of water resources in Wisconsin and the Department's authority to protect groundwater, it is not feasible to believe that a large CAFO that stores manure at or below grade or land applies manure would not have an actual discharge to waters of the state.

NR 243.121 - General Permit Coverage

52. Comment: A number of environmental advocacy and conservation groups and public citizens had concerns about the use of general permits for CAFOs. Concerns expressed included lack of public participation and notification, the inability for general permits to address unique operational concerns, and the lack of oversight for regulated operations. Comments were made that the Department could increase permit fees and fines to address staff resource issues rather than issue general permits. A comment was made to include public participation requirements for CAFO general permits. A producer also commented with the concern that a general permit would not account for individual circumstances. Siting antidegradation policies, an environmental advocacy group commented that the DNR cannot issue general WPDES permits for any CAFOs that apply liquid manure in watersheds draining to Fish and Aquatic Life waters, Exceptional Resource Waters, or Outstanding Resource Waters. Instead, these CAFOs must receive individual WPDES permits.

A number of producers and producer groups supported the use of general permits for reasons such as avoiding potential personal attacks that may be associated with public hearings, addressing reductions in DNR staff workload, potential cost savings, promotion of innovation and implementation of best management practices and the fact that the Department has been using general permits in other industrial sectors. A producer group commented that the Department should feel confident in its authority to develop the general permit program applicable to NR 243 given the holding in *Texas Independent Producers & Royalty Owners Ass'n v. EPA*

Response: No change made. The Department intends to establish a general permit program, but the Department recognizes it is important to address concerns about public participation when issuing general permits and when granting coverage to specific farms. The Department will be engaging advocacy groups to address this concern once the general permit issuance process begins but does not believe that such efforts should be codified.

The Department does not concur that under federal law, antidegradation clearly applies to discharges from permitted land application activities by CAFOs. Under federal law, it can be argued that discharges from CAFO land application areas that occur after compliance with the best management practices and conditions in the NPDES permit are considered agricultural stormwater discharges not subject to NPDES permit requirements, and therefore antidegradation does not apply.