WISCONSIN
DEPT. OF NATURAL RESOURCES

BUREAU OF WATERSHED MANAGEMENT
PROGRAM GUIDANCE
WPDES CONCENTRATED ANIMAL FEEDING OPERATION (CAFO) PROGRAM

CAFO NUTRIENT MANAGEMENT PLANS - PUBLIC NOTICE OF MODIFICATIONS TO AN NMP

Effective Date: January 2014

Guidance #: 3800-2014-01

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APPROVED:

Pam Biersach — Jan 30, 2014

Pam Biersach, Director
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Date

Background

In December of 2008, revisions to federal regulations for Concentrated Animal Feeding Operations (CAFO) went into effect requiring public notification of substantial modifications to CAFO nutrient management plans (NMP).[1] State statutory changes (2011 Act 167) incorporated this federal requirement and specified that substantial changes to a nutrient management plan require public notice. 2011 Act 167 also established electronic notice procedures for substantial NMP changes and provided a reduced time period for public comment on changes. This document is intended to provide guidance to DNR staff working with CAFO NMPs to identify changes to an NMP that may require public notice and comment.

Under federal and state requirements, CAFO NMPs are considered a term of an NPDES/WPDES permit and are an enforceable part of the permit. However, federal CAFO rules acknowledge that not all changes to an NMP are substantial enough to warrant public notice. The key consideration under federal law as to whether a change to an NMP is substantial and subject to public participation procedures is whether the change will increase the risk of pollutant (nitrogen and phosphorus) transport to navigable waters.

Substantial Modifications

The Department recommends that the following NMP changes be considered substantial and accordingly require electronic public notice and participation procedures prior to approval/inclusion in an NMP:

- Addition of new fields that are not included in the permittee's, or another permittee's, current NMP.
- Addition or identification of drainage tile lines, inlets or outlets (new or existing) not identified in a permittee's current NMP.
- Planned crop nutrient application rates for nitrogen or phosphorus above recommendations contained in University of Wisconsin publication A2809[2], "Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin."
- Planned applications of manure/process wastewater on crops that do not have nutrient application rates contained in A2809 and on fields that increase the risk of phosphorus transport (as calculated using the Wisconsin P-Index) to navigable waters.
- Planned applications of manure/process wastewater during frozen or snow-covered ground conditions to fields not identified in the current NMP, or another permittee's NMP.
- For permittees using the soil test phosphorus method on a field as specified in s. NR 243.14(5)(a)1. (i.e., they are not using the Wisconsin Phosphorus Index), changes to the following:
    (1) application method, tillage or crop rotation that result in an increase in rotational soil loss (even if "T" is still met)
    (2) crop rotation and/or nutrient sources applied that increase rotational soil test P levels above the responsive range or the prior soil test P level for the field.

[1] See November 20, 2008, Federal Register, pages 70451 (discussion) and 70484 (rule language, 40CFR 122.42(e)(6), at http://www.epa.gov/npdes/regulations/cafo_final_rule_preamble2008.pdf. http://cfpub.epa.gov/npdes/afo/cafofinalrule.cfm

[2] See http://learningstore.uwex.edu/assets/pdfs/A2809.pdf

- Changes related to adoption of an advanced agricultural research project that include exemptions from permit conditions related to phosphorus transport (calculated using the Wisconsin P-Index) to navigable waters, in accordance with s. 283.60, Stats.

- Other NMP changes (e.g., new crops, manure sources or implementation of new technologies for applying manure or process wastewater) that the Department determines on a case-by-case basis that may increase the risk for phosphorus transport to navigable waters. Staff should work with the Central Office Nutrient Management Specialist if there is a question about whether such a change to an NMP requires public notice.

Public Notice Process for Substantial Changes

Recent statutory changes (2011 Act 167) to ss. 283.39(1) and(1m), and 283.53(2)(b), (c) and (d) Wis. Stats., allow for electronic (web-based) noticing of substantial changes to an NMP and provide a 14 day public notification and comment procedure. Under these statutory revisions, the public comment period on a substantial change to a nutrient management plan is 14 days from the date the notice is placed on the Department's Internet website (ss. 283.39(1)(d) and 283.53(2)(d), Wis. Stats.). Any requests for an informational hearing must also be filed with the 14 day period. Once the time period has lapsed, the Department should review all comments received, decide to approve or disapprove the change and issue a Notice of Final Determination.

Non Substantial Modifications

The department recommends NMP changes that amend the NMP terms, but do not meet the substantial modifications criteria (shown above), be considered non-substantial changes and accordingly require some public notification prior to approval/inclusion in an NMP. Notifications may be electronic (web-based) and should not include opportunity for public comment.

NMP Modifications, NMP Terms and Department Review and Approval

The department recommends NMP modifications should not become effective and should not be implemented until the department has reviewed and approved the change(s). To maintain compliance, changes to a NMP by a CAFO must not only be consistent with NR 243 and WPDES requirements, but also federally required NMP terms. Accordingly, the department recommends very few changes to a NMP *constitute a substantial or non-substantial revision to the NMP terms* which require public notification. Please see Appendix 1 for more details on these items.

Questions regarding this guidance should be directed to Andrew Craig, Statewide Nutrient Management Specialist, at (608) 267-7695, e-mail: Andrew.Craig@Wisconsin.gov.

CREATED:

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APPROVED:

Mary Anne Lowndes, Chief
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Runoff Management Policy Management Team approved on 01/03/2014 (date).

APPENDIX 1

When NMP Modifications Occur

In accordance with NR 243 and WPDES permits, the NMP should be reviewed and changed by the permittee on, at least, an annual basis to reflect any operational changes and methods/practices actually implemented. Some CAFOs revise their NMPs more often than annually to reflect addition of new land or other manure management practices that may not be currently addressed by their plan. Department staff may also require amendment of the NMP at any time. An NMP amendment does not become effective until the department has reviewed and approved the amendment.

NMP Modification Procedures

The department recommends the following procedures for NMP modifications:

- The CAFO owner or operator must provide the updated NMP to the department and identify changes from the previous version.
- The department should review the revised NMP and determine whether the changes to the NMP *necessitate revision to the NMP terms incorporated into the CAFOs permit.*
- If the changes *do not revise* the NMP terms, the department should notify the CAFO owner or operator that the permit does not need to be modified and upon such notification the CAFO may implement the revised NMP.
- If the changes *revise the NMP terms*, the department should determine if such changes are substantial or non-substantial. Both types of changes require public notification (described below).
- **If substantial,** the department should:
    - Notify the public and make the proposed changes and the information submitted by the CAFO available for public review and comment through electronic or other method(s)
    - Respond to all significant comments received during the comment period
    - Require the CAFO owner/operator to revise the NMP as necessary, in order to approve the revision to the terms of the NMP
    - Incorporate revised terms into the permit
    - Notify the CAFO owner or operator and inform the public of its final decision concerning revision to NMP terms and conditions of the permit.
    - Notify the CAFO owner or operator they can implement the revised NMP
- **If non-substantial,** the department should:
    - Make revised NMP publicly available and include it in the public record
    - Revise the terms of the NMP into the permit
    - Notify the owner and operator and inform the public of any changes to the terms of the NMP incorporated into the permit.
    - Notify the CAFO owner or operator they can implement the revised NMP

NR 243 requirements and NMP Terms

The department believes the NMP requirements within NR 243 and WPDES permits meet or exceed the NMP term requirements described in EPA's 2008 Federal CAFO rule. Accordingly, when the department approves a NMP, which is made available for public review and comment, it not only confirms the NMP is consistent with NR 243 and the WPDES permit, but also that the NMP is consistent with federally required NMP terms.

NMPs meet federal NMP term requirements because they:

- Are field-specific and must be annually updated with crops and land application practices actually implemented.
- Account for the source, rate, timing, form and method of application for all major nutrients consistent with the [Wisconsin NRCS 590] standard and soil fertility recommendations found in University of Wisconsin –Extension Publication A2809 -http://learningstore.uwex.edu/assets/pdfs/A2809.pdf.

- Have specific yield goals for each crop selected and that are attainable under average growing conditions.
- Require all fields in NMP meet 'T', tolerable soil loss, over the crop rotation.
- Require implementing a Phosphorus Index or Soil Test P method over a crop rotation on all fields to assess nutrient delivery to surface waters and reduce build-up of soil phosphorus levels.
- Prohibit ponding, runoff, or drainage of nutrients to subsurface tiles during or immediately after application.
- Avoid application of nutrients within surface waters and require specific setbacks from navigable waters, wetlands, wells, tile inlets and direct conduits groundwater.
- Require identification of low risk fields and land application practices (e.g., increased setbacks, reduced rates, etc.) for manure or process wastewater applications during frozen or snow covered ground conditions.
- Prohibit applications of manure and process wastewater within Surface Water Quality Management Areas when the ground is frozen or snow covered and on all fields between February 1 and March 31.
- Require protocols for testing soil and manure, process wastewater and other nutrient sources.
- Require keeping records of crops, yields, tillage, nutrient application sources, rates, timing and methods actually implemented.

NMP methodology and Predictable Alternatives

NMPs approved by the department contain a methodology (i.e., narrative) that describes how the CAFO will meet the NR 243 and WPDES permit requirements/terms described above. The NMP narrative not only provides some reasonably predictable alternatives for land application and nutrient management practices that CAFOs may implement during the permit cycle, but also allows some flexibility for maintaining compliance, provided selected practices remain below numeric criteria or comply with applicable technical criteria within NR 243 and WPDES permit.

Examples

CAFOs may implement different cropping or management practices on fields versus what was planned. Such changes may increase the field specific risk assessment for Phosphorus on field(s) beyond the levels in the department approved NMP (e.g., a field with a PI of 3 may increase to a PI of 5 after cropping/management changes). However, because a department approved NMP narrative describes all NMP fields used by the CAFO for manure or process wastewater applications will be managed to achieve a rotational P Index of 6 or less, the increase in PI on the field is acceptable because it still meets the NR 243 performance standard. The NMP narrative/methodology clearly explains the CAFO will manage fields within allowable code requirements (NR 243) and recognizes making further reductions below a P-Index of 6 are not required.

When the NMP narrative references the University of Wisconsin crop recommendations (A2809), http://learningstore.uwex.edu/assets/pdfs/A2809.pdf, CAFO's have the option to grow many different crops over a crop rotation because multiple crops are listed within A2809. In addition, A2809 also provides technical criteria related to land application and nutrient management practices, including:

- Crop specific maximum amounts of nitrogen and phosphorus requirements expressed in pounds per acre; maximum rate determinations are based upon soil yield potential and measured crop response as determined via ongoing UW crop research trials within Wisconsin.
- Soil specific yield potential ratings
- Soil pH and Lime requirements
- Applicable N and P credits from manure, legumes or other nutrient sources
- Best management practices for preventing N or P losses, including:
    - Field specific soil testing
    - Manure testing to determine accurate application rates and timing
    - Applying nutrients for optimum, and not maximum, yield
    - Managing nitrogen to avoid losses via: N-crediting, selecting correct nitrogen rates, sources and timing and using soil nitrate testing and N-inhibitors
    - Reducing or eliminating P applications on fields to draw down soil test P levels