ATCP 50 Nutrient Management Revisions

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Non-Point Rule Redesign

- 1997 Wisconsin Act 27
  - legislature mandated a redesign of non-point pollution programs
- State Statute 281.16
  - DNR set Ag Performance standards (NR 151)
  - DATCP set technical standards (ATCP 50)
- State Statute 92.05
  - DATCP develops a statewide nutrient management program (ATCP 50)

Ag Performance Standards

- Control erosion to meet tolerable soil loss (T) RUSLE 2
- Construct manure storage facilities to standards
- Divert clean water around feedlots close to streams
- No overflowing manure storage facilities
- No unconfined manure piles near surface water
- No direct feedlot or manure storage runoff
- Restrict livestock access to maintain adequate sod cover (vegetation) near water
- Apply nutrients to crop needs

ALL STANDARDS BECAME EFFECTIVE Oct. 1, 2002 EXCEPT NUTRIENT MANAGEMENT

Why Phosphorus based 590 Plans

- **EQIP** - USDA NRCS cost share program
- **NR 243** - WPDES permit CAFO regs
- **NR 151** - Water quality performance standards
- **ATCP 51** - Sets statewide standards for new or expanded livestock operations
- **ATCP 50** - Incorporate P-based 590 standard
- **ATCP 40** - Distribution of manipulated manure needs a license, exempt from tonnage fee if going to fields complying with ATCP 50.04

Proposed ATCP 50 Revisions

- Incorporate Draft November 2004 version of 590 Standard
  - Includes two phosphorus management options:
    - Phosphorus Index
    - Soil test P option
- Qualified nutrient management planners
  - American Society of Agronomy (ASA) has changed/eliminated some of its certification programs:
    - eliminated crop scientist and crop specialist certifications and moved them to the certified professional agronomist certification (CPAg)
    - eliminated soil specialist certification and moved them to the soil scientist certification under Soil Science Society of America (SSSA)
  - ATCP 50 will recognize CPAg under ASA and Soil Scientist under SSSA

Proposed ATCP 50 Revisions

- Manure nutrient values in a nutrient management plan must be based on one of the following:
  - Standard "book values" in WI Conservation Planning Tech Note WI-1, companion document to 590 nutrient management standard
  - Manure analyses conducted at a laboratory that meets the following standards:
    - Laboratory participates in the Manure Analysis Proficiency (MAP) program administered by Colorado State University
    - Laboratory can perform analyses according to methods in "UWEX Publication A3769, Recommended Methods of Manure Analyses"
- DATCP certified labs in MAP program
  - UW Soil & Forage Lab
  - Agsource Soil & Forage Lab
  - Dairyland Laboratory
  - Rock River Laboratory
  - A&L Great Lakes Laboratories

Proposed ATCP 50 Revisions

- Nutrient applications must follow recommendations in UW Publication A2809, Soil Test Recommendations for Field, Vegetable and Fruit Crops unless one of the following situations justifies a deviation:
  - Soil or tissue test reveals a specific nutrient deficiency
  - Excess nutrients are the result of an unforeseen change in the type of crop planted
  - Excess nutrients are the result of manure applications made in the last year prior to writing or implementation of the nutrient management plan
  - Other special agronomic conditions documented by the planner

Proposed ATCP 50 Revisions

- Proposed revisions have no effect on cost share requirements. ATCP 50 entitles farmers not complying - to 70% cost sharing.
- Some farmers will be required to comply with NM requirements regardless of cost sharing. Those include:
  - Operations needing a WPDES permit under NR 243 (>1000 au's)
  - Operations who voluntarily construct a manure storage facility and need a permit under local ordinance
  - Operations who need a permit for a new or expanded livestock facility with 500 or more AU's (ATCP 51)
  - Participants in Farmland Preservation Program
- Public hearings to take place in mid March

Other Codes Affected by ATCP 50 Revisions

- ATCP 40 - Fertilizer and Related Products
  - Defines manipulated manure and creates an exemption for its distribution
- Proposed manipulated manure definition
  - "Manure that is ground, pelletized, mechanically dried, packaged, supplemented with plant nutrients or other substances, or treated to facilitate sale or distribution as a fertilizer or soil or plant additive"

Other Codes Affected by ATCP 50 Revisions

- ATCP 40 - Fertilizer and Related Products
  - Proposed rule also creates a license and tonnage fee exemption for bulk manipulated manure distributed to cropland that is implementing a nutrient management plan that complies with ATCP 50.04. (proposed November 2004 590 std)
- Public hearings to take place in 2005

Other Codes Affected by ATCP 50 Revisions

- ATCP 51 - Livestock Facility Siting Rule
  - Sets statewide standards for new or expanding livestock facilities with greater than 500 AU's.
    - Applies in areas that require local approval
    - Can regulate at lower size threshold if an ordinance existed before July 9, 2003
    - Only applies to existing operations that expand by more than 20%

Other Codes Affected by ATCP 50 Revisions

- ATCP 51 - Livestock Facility Siting Rule
  - Applicants must submit a complete standardized application packet - applicant info, facility info, maps, & worksheets

Worksheet number	Standard or topic covered
1	Animal units (AU's) calculation
2	Odor management (facilities and land application)
3	Waste and nutrient management
4	Waste storage structures
5	Runoff management
6	Mortality management

Other Codes Affected by ATCP 50 Revisions

- ATCP 51 NM requirements
  - All applicants complete parts A & B of the waste and nutrient management worksheet
    - types and amounts of waste generated
    - capacity and duration of waste storage
    - final disposal methods for waste
    - acreage available for landspreading waste
    - maps showing fields where propose to landspread waste

Livestock Type

Applicant Signature

arm-lwr- 11/04 Jan. 2005 **Worksheet 3**

Wisconsin Dept. of Agriculture, Trade & Consumer Protection
2811 Agriculture Drive, PO Box 8911, Madison WI 53708-8911
Phone: (608) 224-4611 or 608-224-4610

Part A – Waste Generation and Storage Summary

Instructions: All applicants must complete Parts A and B of this worksheet. Facilities with fewer than 500 "animal units" may be exempt from Part C, depending on results of Part B. Part C, if it applies, must be signed by a qualified nutrient management planner and the applicant..

Specify a single livestock type (i.e. dairy, beef, swine, etc., *Use a separate worksheet for each livestock type)*

	Last Point of Storage or Collection		**Waste Generated**		
Description	**A** **Storage Capacity** (Gallons or Tons)	**B** **Source** (animal waste, wastewater, leachate, etc)	**C** **Average Annual Volume Produced** (Gallons or Tons)	**D** **Total Annual Volume Produced** (Gallons or Tons)	**E** **Storage Duration in Days** (Column A divided by Column D times 365 days)
Storage Type					
Storage Type					
Storage Type					

Signature of Applicant _____ Date _____

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Part B – Land Base for Applying Nutrients

1. Enter total "animal units" in proposed livestock facility (from worksheet 1): _____

2. What percentage of the waste from the livestock facility will be:
   a) Applied to land: _____%. Attach map showing where waste will be applied to land.
   b) Processed and sold as commercial fertilizer, under a fertilizer license: _____%
   c) Disposed of in other ways (describe): _____%

3. Multiply the percent in line 2.a by the number of "animal units" in line 1. Result (# of "animal units"): _____

4. Acres of cropland currently available for land application (owned, rented, or landspreading agreement):

5. Divide # of acres in line 4 by # of "animal units" in line 3 to obtain ratio of acres to animal units: _____.

6. Is the ratio in line 5 is equal to or greater than the applicable ratio in Table 1?

If YES, and if the # of "animal units" in line 1 is less than 500, you need not complete Part C. Otherwise, complete Part C.

Table 1

Animal Type	Acres per Animal Unit
Dairy	1.5
Beef	1.5
Swine	1.0
Chickens/Ducks	2.5
Turkeys	5.5
Sheep/Goats	2.0

_____ _____
Signature of Applicant Date

Waste handling practices

Proposed AU's

Acres available for landspreading

Applicant Signature

Line #6 - If meet quick test of animal units to acres and are <500 AU's then no need to complete part C. If >500 AU's then complete Part C

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Part C - Nutrient Management Checklist

Instructions: All applicants complete unless exempt under Part B.
For Wisconsin's NRCS 590 (November 2005) Nutrient Management Standard Requirements

County Name:	Date Submitted	Township (T. _____ N., S.) – (R. _____ E., W.)
Cropland Acres: (owned, rented, or with manure spreading agreement)		Name of livestock operator submitting checklist:

	Yes	NA
1. Are the following field features identified on maps or aerial photos?		
a) Field location, soil survey map unit(s), field boundary, and field identification number		
b) Surface Water Quality Management Area (SWQMA): Land within 1,000 ft of lakes and ponds or within 300 ft of perennial streams		
c) Areas prohibited from receiving nutrient applications: Surface water, established concentrated flow channels with perennial cover, permanent non-harvested vegetative buffer, non-farmed wetlands, sinkholes, lands where established vegetation is not removed, nonmetallic mines, areas within 50 feet of a potable drinking water well, and fields eroding at a rate exceeding tolerable soil loss (T)		
d) Areas prohibited from receiving winter nutrient applications: Slopes > 12% and slopes >9% that are not contoured or contour stripped		
e) Areas where winter applications are restricted unless effectively incorporated within 72 hours: Land contributing runoff within 200 feet upslope of direct conduits to groundwater such as a well, sinkhole, fractured bedrock at the surface, tile inlet, or nonmetallic mine		
f) Sites vulnerable to N leaching: Areas within 1,000 feet of a municipal well, and soils listed in Appendix 1 of the Conservation Planning Technical Note WI-1		
2. Are erosion controls implemented so the crop rotation will not exceed T on fields that receive nutrients according to the conservation plan or WI P Index model?		
3. Check the methods below used to determine field soil nutrient levels:		
a) Soil samples were collected and analyzed within the last 4 years according to UW Publication A2100 recommendations		
b) For fields not meeting (a.) above, soil test phosphorus levels are assumed to be greater than 100 ppm soil test P. *		
c) For fields not meeting (a.) above, preliminary estimates of soil nutrients were determined using limited soil sampling (> 5 acre per sample) but analyzed by a DATCP certified laboratory. *		
*For fields with soil nutrient levels determined under (b) or (c), the applicant must collect and analyze soil samples meeting the requirements of A2100 within 12 months of siting approval, and revise the nutrient management plan accordingly.		
4. Using the field's predominant soil series and realistic yield goals, are planned nutrient application rates, timing, and methods of all forms of N, P, and K listed in the plan and consistent with UW Publication A 2809, *Soil Test Recommendations for Field, Vegetable and Fruit Crops*, and the 590 standard?		
5. Do manure production and collection estimates correspond to the acreage needed in the plan? Are manure application rates realistic for the calibrated equipment used?		
6. Is a single phosphorus (P) assessment of either the P Index or soil test P management strategy uniformly applied to all fields within a tract?		
7. Are areas of concentrated flow, resulting in reoccurring gullies, planned to be protected with perennial vegetative cover?		
8. Will nutrient applications on non-frozen soil within the SWQMA comply with the following?		
a) Unincorporated liquid manure on unsaturated soils will be applied according to Table 1 of the 590 standard to minimize runoff		
b) One or more of the following practices will be used: 1) Install/maintain permanent vegetative buffers, or 2) Maintain greater than 30% crop residue or vegetative coverage on the surface after nutrient application, or 3) Incorporate nutrients leaving adequate residue to meet tolerable soil loss, or 4) Establish fall cover crops promptly following application		
9. Is a narrative included which describes proposed manure collection, transportation, and application methods?		

Certify that the documentation supporting this checklist is complete and accurate:

Signature of nutrient management planner: _____
(qualified by 1. NAICC-CPCC, 2. ASA-CCA, 3. ASA-Professional Agronomist, 4. SSSA-Soil Scientist)

Signature of livestock operator: _____

Signed by qualified planner and livestock operator

Local government may request documentation to substantiate answers given on this checklist

Other Codes Affected by ATCP 50 Revisions

- ATCP 51 - Livestock Facility Siting Rule
  - Rule does not require yearly updates of NM plan but local authority may request updates to monitor compliance
  - Public hearings to take place in mid March jointly with ATCP 50 public hearings

Conclusions

- Ultimate goal

- Have one nutrient management standard for Wisconsin!!!!!