ATCP 50, the 590 Standard, and Nutrient Management in WI

Sara Walling, Chief
Nutrient Management and Water Quality Section, DATCP
DATCP’s Statutory Authority
Wis. Stat. § 281.16(3)

- DATCP is directed to do the following:
  - Develop and disseminate technical standards to implement the performance standards and prohibitions set by DNR
  - Disseminate alternative technical standards for situations in which more than one method exists to implement the performance standards and prohibitions set by DNR

- DATCP conservation practices and technical standards shall at a minimum cover animal waste management, nutrients applied to the soil and cropland sediment delivery

- Cost-Sharing: Farms in existence before October 14, 1997 are not required to comply with the performance standards, prohibitions, conservation practices, or technical standards unless cost-sharing is available
Administrative Rule
Chapter ATCP 50, Soil and Water Resource Management Program

• ATCP 50.04 Farm Conservation Practices
  • Nonpoint source pollution control
  • Soil erosion control
  • Nutrient management plan (NMP)
  • Tillage setback

• ATCP 50.06 Installing Conservation Practices

• ATCP 50.08 Cost-Sharing Required

• ATCP 50.10 County Program

• ATCP 50.12 Land and Water Resource Management
What is a Nutrient Management Plan?

A Whole Farm Crop Management Plan which accounts for ALL crops, management decisions, and N-P-K nutrients for the crop rotation

- Requires soil testing

  - Sets restrictions on nutrient application rates, timing and method where sensitive landscape features exist (Similar to the 4 R’s)

  - UW Soils Sampling Soils for testing, uses UW soil analysis protocols, DATCP certified laboratories

  - UW Ex Pub A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in WI

  - Based on USDA Soil Surveys, considers numerous soil profile characteristics, 1,000s of field trials on corn yields, etc.
Who needs a NMP?

- All farms,
  - When offered [70%] cost-share for NM
  - When accepting manure storage cost-share
  - When participating in farmland preservation program
  - When regulated under a county ordinance for manure storage or livestock siting
  - When regulated under a DNR WPDES permit
  - If issued a notice of discharge
Percent of County Cropland covered by a 590 NMP

- Based on NM checklists submitted to DATCP by county LCDs, NRCS, DNR and NM planners
NRCS 590 NM Standard

- Divided into 3 areas
  - Criteria for all sites
  - Criteria to protect groundwater (N)
  - Criteria to protect surface water (P)

- Updated in 2015 (2005 was previous version)
- Proposed to incorporate into ATCP 50
590 Standard Revision Team Members

Joe Bragger, Bragger Family Dairy, UW Discovery Farms

John Koepke, Koepke Farms, UW Discovery Farms

Kevin Masarik, Groundwater Education Specialist, UW – Steven’s Point

Laura Chern, Hydrogeologist, WDNR

Andrew Craig, Nutrient Management Specialist, WDNR

Terrence Kelly, State Agronomist, Wisconsin NRCS

Pat Murphy, State Resource Conservationist, NRCS

Carrie Laboski, Associate Professor and Soil Scientist, UW - Madison

Todd Schaumberg, CCA, Polenske Agronomic Consulting

Nikki Wagner, CAFO NM Specialist, Frontier-Servco FS

Sue Porter, Nutrient Management Specialist, DATCP

Sara Walling, Nutrient Management and Water Quality Section Chief, DATCP

Tony Smith, Resource Conservationist, Manitowoc Soil & Water Conservation Dept.

Matt Zoschke, County Conservationist, Clarke County LCD
What Didn’t Change

• A2809 limits N and P application rates to crop need
• Soil testing
• Restriction mapping
• Meeting T
• Meet the PI or Soil Test P
• No spreading on saturated soils, no ponding, or runoff
What Didn’t Change

- No spreading on:
  - Saturated soils
  - Concentrated flow channels
  - Non-harvested buffers
  - Land where vegetation is not removed
  - Fields exceeding T

- No ponding or runoff during application
590 Changes – Winter Spreading Plan

Current:
• 7,000 gal/ac limit
• No manure spreading
  • Within SWQMA
  • On locally identified areas (ex. Sinkholes)
  • Within 200 ft upslope of direct conduits to groundwater
  • On slopes >12%

New:
• 7,000 gal/ac limit or 60 lbs $P_2O_5$, whichever is less
• No manure spreading
  • Within SWQMA
  • Within 300 ft of direct conduits to groundwater, not just upslope
• No liquid manure application in February and March on:
  • DNR Well Compensation Areas for manure contamination
  • Soils with 5 ft or less to Silurian dolomite
590 Changes – Winter Spreading Plan

Current:
• Requires a winter spreading plan that identifies:
  • Areas of fields that don’t have a winter restriction
  • ID Fields with low slope and erosion, high roughness, farthest from surface waters

New:
• A Winter Spreading Plan identifies:
  • Quantity of manure and/or organic by-products spread during periods of frozen or snow-covered soil, or generated in 14 days, whichever is greater
  • Capacity of storage for each manure type generated
  • Capacity for stacking manure that is \( \geq 16\% \) dry matter without permanent storage.
590 Changes – Winter Spreading Plan

Current:
• 7,000 gal/ac limit

• No manure spreading
  • Within SWQMAAs
  • On locally identified areas (ex. Sinkholes)
  • Within 200 ft upslope of direct conduits to groundwater
• On slopes >12%
590 Changes – Winter Spreading Plan

New:

• Do not apply on slopes greater than 6% unless 2 of the following are implemented:
  • Contour buffer strips or contour strip cropping
  • Leave all crop residue and no fall tillage
  • Apply manure in intermittent strips on no more than 50% of the field
  • Apply manure on no more than 25% of the field during each application - minimum of 14 days between applications
  • Reduce application rate to 3,500 gallons or 30 lbs. of P$_2$O$_5$
590 Changes – Winter Spreading Plan

New:

• Do not apply to fields where concentrated flow channels are present unless 2 of the following are implemented:
  • ANY of the previous five options, or
  • No manure application within 200 ft of all concentrated flow channels;
  • Fall tillage is on the contour and slopes are less than 6%
590 Revisions – *Groundwater*

**Current:**
- Incorporate manure within 200’ upslope of direct conduits to groundwater
- No manure within 50’ of drinking well, unless grazing

**New:**
- **No nutrients:**
  - Within 50’ of direct conduits to groundwater (within 300” in winter), unless grazing
  - Within 8’ of irrigation wells
- Only manure that is treated to substantially eliminate pathogens can be applied:
  - Within 1,000’ of a Community potable water well
  - Within 100’ of a Non-Community potable water well (church, school, and restaurant)
590 Revisions – Groundwater

New:

- No manure can be applied to:
  - Areas identified by the Land Conservation Committee or in a conservation plan as areas contributing runoff to direct conduits to groundwater unless manure is substantially buried within 24 hours of application.
590 Changes –
Fall Nitrogen Restrictions

**Current:**
- When manure is applied to N restricted soil types, rate limits based on soil temps (50° or Sept. 15)

**New:**
- Practices are different depending on the soil type impairment
- Applications in the fall are limited to either 120 lbs N/acre or 90 lbs N/ac (~ half the crop need)
- Rate limits based on soil temps (50° or October 1st)
Misc. Additions and Changes

• No nutrient applications on areas of active snow melt
• Show the farm has adequate land for manure produced
ATCP 50 Timeline for Current Revision

- **February 2016** – Scope statement approved
- **Currently** – Preparing hearing draft and related documents
- **November 2016** – DATCP Board to request approval to go to public hearing
- **January 2017** – Conduct public hearings
- **May 2017** – Present final draft rule to DATCP Board
- **Late 2017/Early 2018** – Rule becomes effective
NR 151 Revisions into ATCP 50?

• A new scope statement would need to be drafted and approved by DATCP Secretary, ATCP Board, and Governor – s. 227.135(2)

• Without knowing the changes and additions to NR 151, it is too early to know where, what and how to amend ATCP to reflect NR 151 changes –

• Anticipate 2+ years to revise ATCP 50