ARM-LWR-480 (06/10)

Wisconsin Department of Agriculture, Trade & Consumer Protection
Division of Agricultural Resource Management
Bureau of Land and Water Resources
PO Box 8911, Madison WI 53708-8911, Phone: 608-224-4605

Nutrient Management Plan Checklist

Sec. 92.05(3)(k), Wis. Stats.
ATCP 50.04(3) Wis. Admin. Code

Use this form to check nutrient management (NM) plans for compliance with the WI NRCS 590 Standard (Sept. 2005).

County name: Brown Date Plan Submitted: 6-14 Growing season year NM plan is written for 2014-19 (from harvest to harvest)
Township (T. N) – (R. E ☐Initial Plan or ☒ Updated Plan (choose one)

Name of qualified nutrient management planner		Planner's business name, address, phone:
Kevin Beckard		AgSource Laboratories: 106 N Cecil Street Bonduel, WI 54107
Circle the planner's qualification: 1. ☐ NAICC-CPCC 2. ☒ ASA-CCA 3. ☐ ASA-Professional Agronomist 4. ☐ SSSA-Soil Scientist 5. ☐ DATCP approved training course 6. ☐ Other credentials approved by DATCP	Cropland Acres (owned & rented) 2,160	Name of farm operator receiving nutrient management plan: Ledgeview Farms- [redacted]
	Rented farm(s) landowner name(s) and acreage: See narrative	

Check relevant program requirement/regulation plan developed for: ☒Ordinance ☐USDA ☐DATCP ☐DNR ☒NR 243 – ☐NOD or ☒WPDES

		Yes	No	NA
1.	**Are the following field features identified on maps or aerial photos in the plan?**			
a.	Field location, soil survey map unit(s), field boundary, acres and field identification number	x		
b.	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, and fields eroding at a rate exceeding tolerable soil loss (T)	x		
c.	Areas within 50 feet of a potable drinking water well where mechanically-applied manure is prohibited	x		
d.	Areas prohibited from receiving winter nutrient applications: Slopes > 9% (12% if contour-cropped); Surface Water Quality Management Area (SWQMA) defined as land within 1,000 ft of lakes and ponds or within 300 ft of perennial streams draining to these waters, unless manure is deposited through winter gleaning/pasturing of plant residue and not exceeding the N and P requirements of this standard; Additional areas identified within a conservation plan as contributing runoff to surface or groundwater	x		
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	x		
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	x		
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?**	x		
3.	**Were soil samples collected and analyzed within the last 4 years according to UW Publication A2100 recommendations?**	x		
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?**	x		
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?**	x		
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?**	x		
7.	**Are areas of concentrated flow, resulting in reoccurring gullies, planned to be protected with perennial vegetative cover?**	x		
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	x		
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	x		

I certify that the nutrient management plan represented by this checklist complies with Wisconsin's NRCS 590 nutrient management standard.
Signature of qualified nutrient management planner

Kevin C Beckard

NR 243 CAFO NUTRIENT MANAGEMENT PLAN CHECKLIST

Farm Name and Permit No.: **Ledgeview Farms** Date Plan Submitted: June 2014

Initial Plan / Annual Update / Permit Renewal (circle one) Applicable growing season: 2014-2019

Planner Name and Contact Information: Kevin Beckard, AgSource Laboratories, 920-309-1948

Cropland acres, owned: 700 Agreement or Rented Acres: 1,460 Total spreadable acreage: 2,075(Inc)

Total acreage used for land application in previous 12 months: ~865

Total animals at facility in previous 12 months: ~1,700

		Yes	No	Section
1.	**Does plan meet Wisconsin's NRCS 590 nutrient management standard, including nutrient budgeting, soil test recommendations and selecting dominant critical soil unit criteria?** (NRCS soil unit criteria: http://www.wi.nrcs.usda.gov/technical/consplan/rusle.html)	x		
a.	If yes, does plan contain a copy of NRCS 590 checklist?	x		Tab 1
2.	**Does plan have a narrative that describes:**			
a.	Expected numbers of animal units on site at end of first year of permit coverage and also expected numbers for remaining permit term (next 4 yrs). – NR 243.12(2)(6).	x		Tab 6
b.	Expected amounts and types of manure and process wastewater produced on annual basis.	x		Tab 3&6
c.	Amount of manure and process wastewater to be land applied.	x		Tab 3 & 6
d.	Anticipated frequency and method(s) of land application.	x		Tab 1& 3
e.	Other methods of use, disposal, distribution or treatment of manure or process wastewater. **All manure and process waste water will be land applied.**	x		
f.	Tillage and crop rotation information for all fields owned or rented or in 'agreements'.	x		Tab 1&12
g.	Total acreage available (by landowner) for land application owned, rented or in 'agreements'.	x		Tab 1
h.	General manure and process wastewater application requirements - NR 243.14(2)(b)(1-13) & (c-f) AND methods explaining how they will be met on all fields in plan *(e.g., field and map verification procedures, applicable best management practices and recordkeeping procedures to track actions taken).*	x		Tab 1
i.	Nutrient crediting requirements - NR 243.14(3) - and how they will be met.	x		Tab 1 & 3
j.	SWQMA application restriction option for each field AND methods explaining how restriction(s) will be met - NR 243.14(4).	x		Tab 1 & 4
k.	Phosphorus delivery method (P Index or Soil Test P) for each field AND management strategy for fields with soil test P above 100 ppm and 200 ppm - NR 243.14(5).	x		Tab 1
l.	Fields adjacent to or with high potential to drain to impaired or outstanding/exceptional waters (see DNR impaired waters map tool: http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=SurfaceWaterViewer).	x		Tab 2
m.	Identification of sites for winter (frozen or snow covered ground) applications that meet criteria in tables 4 and 5 for manure - NR 243.14(6-8) - AND methods explaining how they will be met. (NOTE: Fields selected for winter application must have the lowest risk of pollutant delivery to waters of the state and have winter acute loss index value of 4 or less using the Wisconsin Phosphorus Index).	x		Tab 5
n.	Documentation of adequate storage (180 days) and methods of maintaining adequate storage - NR 243.14(9) and NR 243.17(3). ***Once "180 day markers" are established, the date at which manure storages are emptied to the marker will need to be kept tracked of as part of the NMP.***	x		Tab 1
3.	**Are the following field features identified as restricted or high risk areas on spreading maps:** (NOTE: **Checking yes requires plan narrative to describe methods or procedures to identify, avoid, eliminate or minimize the surface or ground water quality risk each feature represents).**			
a.	Private, non-community drinking water well (100ft setback).	x		Tab 4
b.	Community drinking water well (1,000ft setback).	x		Tab 4
c.	Soils within 24 inches of apparent water table or bedrock at time of application (NOTE: water table depth may vary over time and requires field investigation to determine actual depth to groundwater before application).	x		Tab 4 & 14
d.	Fields over 200 ppm soil test phosphorus (manure spreading prohibited unless department approval).	x		Tab 1 & 4
e.	Direct conduits to groundwater (100ft setback).	x		Tab 4

		Yes	No	NMP Section
f.	SWQMA areas and 100ft prohibition, or equivalent. (NOTE: maps must identify all conduits to navigable waters. These include: ditches, concentrated flow channels, sinkholes, agricultural well heads, open tile line intake structures or open vent pipes in fields that discharge to navigable waters and ***grassed waterways that drain directly*** to a navigable water). See DNR navigable waters fact sheet: http://www.dnr.state.wi.us/org/water/fhp/waterway/factsheets/index.html.	x		Tab 1&4
g.	Wetlands and 25ft setback OR start of the SWQMA if connected to navigable water - NR 243.14 (4)(a)(2)	x		Tab 4
h.	Fields adjacent to or with high potential to drain to impaired or outstanding/exceptional waters (see DNR impaired waters map tool: http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=SurfaceWaterViewer).	x		Tab 2
i.	Soils with: (1) High Permeability; (2) Within 20 inches to bedrock; or (3) Within 12 inches to apparent water table. (see Appendix 1, WI Tech Note WI-1 http://www.wi.nrcs.usda.gov/technical/technotes.html).	x		Tab 4
j.	Fields with ephemeral erosion, reoccurring gullies or concentrated flow channels. (NOTE: fields with such soil erosion features do not meet 'T' and cannot receive manure until stabilized with perennial vegetation or other runoff reducing practices. Once established, manure cannot be applied within vegetated flow channels/grassed waterways. If detected, please describe in narrative how and when such areas will be stabilized before any manure is applied to the field.) ***No fields with ephemeral erosion, reoccurring gullies or concentrated flow channels were identified, these will be continually monitored.***	x		Tab 4
k.	Fields exceeding T – tolerable soil loss - over the crop rotation. None exceed		x	Tab 12
l.	Subsurface drainage systems **(e.g., drain tiles and their outlets).**	x		Tab 2
4.	**Does field size and planned manure spreading to all fields reflect acreage lost to SWQMA or other required setbacks?**	x		Tab 4
5.	**Is phosphorus being correctly managed:**			
a.	Fields 50-100ppm P: Balance P needs over a maximum 8 year rotation?	x		Tab 12
b.	Fields 100-200ppm P: Drawdown P by 50% cumulative crop removal over a maximum 4 year rotation AND P Index ≤ 6?	x		Tab 12
c.	Is commercial P above 20lbs in starter being added to fields over 50 ppm P?		x	Tab 3 & 12
6.	**Are manure analyses being taken, at least annually, for every sample point in the permit and being used to develop the plan?** If not completed yet, provide schedule when manure testing will be completed in narrative when plan will be updated with this information.	x		Tab 7
7.	**Is all manure produced by the farm allocated over the entire rotation or five year permit term?** (NOTE: A rotation may be longer or shorter than a five year permit term. If shorter than 5-years, the rotation must repeat or be amended to reflect, at least, the 5 year permit term). **This nutrient management plan has been written to meet NR 243.12(2)(6) which requires the plan be based on the projected number of animals and manure generation estimates to be on the farm at the end of the first year of WPDES permit coverage, which is estimated to be 2015.**	x		Tab 12
8.	**Are all commercial fertilizers and off-farm nutrients included for every year of rotation?**	x	x	Tab 3 & 12
9.	**Are all fields owned, rented or in agreements with farm that have, or are planned to, receive manure or process wastewater included in plan?** (NOTE: Once a field is included in the plan it must remain so regardless of use/status for the 5-year permit term or rotation – this includes fields used only once during permit term or a rotation. For such fields, projecting what nutrients may be applied is required.)	x		Add'l fields to be added in future
10.	**Are all fields in plan managed for the entire rotation? Managed for the entire rotation means:** Planning for the sequence of crops, tillage, budgeting and application of nutrients for up to an 8-year period in order to determine field rotational soil loss, rotation avg. P Index, and applicable manure or legume credits for each rotation year.	x		
11.	**If any fields in plan do not receive manure during the rotation, do they follow UW A2809 crop recommendations for other applied nutrients?**	x		
12.	**Are calibrations provided in plan for all manure hauling equipment (including equipment not owned by the farm)?** If no, provide schedule when calibrations will be completed in narrative.		x	See narrative
13.	**Does plan include copies of soil testing for all NMP fields and manure testing results?** If not completed yet, provide in narrative a schedule when testing for soil for specific fields or manure will be	x		Tab 7 & 8

		Yes	No	NMP Section
	completed and when plan will be updated with this information.			
14.	**Does plan contain fields with high potential for N leaching to groundwater? If yes, do these fields meet NRCS 590 soil temperature, application rate and timing restrictions?**	x		Tabs 3,4,12
15.	**Does plan contain NRCS 590 response procedures for manures, organic byproducts and fertilizer applications that cause drainage to subsurface tiles, ponding or runoff?** (NOTE: Such procedures must include methods to prevent offsite movement of nutrients - via subsurface tile discharge or surface runoff - to waterways and notify DNR of spills or accidental release).	x		Tab 11
16.	**If available, have prior year(s) records (e.g., crop, tillage, nutrients applied) been included in NMP calculations to reflect what actually happened on each field vs. what was planned?**	x		Tab 12
17.	**Are any fields receiving over-applications of nitrogen based on UW Publication A2809? Fields in prior years have been explained.**		x	Tab 3,12

By signing below I certify the CAFO nutrient management plan criteria listed above is: (1) in compliance with all NR 243.14 and applicable NRCS 590 criteria, and (2) all plan requirements have been, or will be, reviewed with farm operator/owner.

Kevin C. Beckwith 6-15-14

Signature of qualified nutrient management planner *Date*

Additional comments or clarifications on checklist items (if necessary, use additional pages)