



February 28, 2020

Norman Shultz, President
 6419 Heg Park Rd
 Wind Lake, WI 53185

Subject: Norway SD 1 WWTF - WPDES Permit WI-0031470
 Water Quality Trading Plan (WQT-2020-0002)– CONDITIONAL APPROVAL

Dear Mr. Shultz:

The Department of Natural Resources (Department) has completed its review of the final draft Water Quality Trading (WQT) Plan for compliance with phosphorus effluent limits at the Norway SD 1 Wastewater Treatment Facility. The initial plan was received in July 2019 and updated versions were received in October 2019 and February 2020. Based on review of the final February 2020 plan, the Department is granting approval with the following conditions:

1. Proposed Nutrient Management Plan –A nutrient management plan (NMP) for all fields owned by Ms. Drought identified in Table 1 of the September 27, 2019 Water Quality Trade Agreement must be submitted and approved by the Department for the lowered trade ratio of 2.4:1 to be applicable. The WQT Plan has not provided all the material needed but rather states that “...A Nutrient Management Plan (NMP) is expected to be in effect by Fall 2020...” As a condition of the approval, a Nutrient Management Plan conforming to Wisconsin’s version of the NRCS Conservation Practice Standard 590 must be provided by November 30, 2020.
2. SnapPlus Modeling – The SnapPlus files submitted to the Department currently go through 2021. The Department requests an additional set of SnapPlus files that extend through crop year 2024 to capture the entire timeframe that corresponds to the upcoming permit term. As a condition of the approval, the extended set of modeling files must be provided by November 30, 2020.

The conditionally approved final WQT plan affords Norway SD 1 Wastewater Treatment Facility with the following available Total Phosphorus credits by year:

Year	Available Credits (lbs/yr) (calculated using the trade ratios shown in the table above)
2020	0
2021	41.9
2022	41.9
2023	41.9
2024	41.9
2025	41.9

The number of credits listed in the table above differs slightly from the WQT plan as submitted due to an adjustment of which fields get the lower uncertainty factor and subsequent trade ratio (3 vs. 2). As stated in Table

4 of the Department's August 2013 *Guidance for Implementing Water Quality Trading in WPDES Permits* document, an uncertainty factor of 3 is required if fields are not brought into compliance with s. NR 151.04, Wis. Adm. Code (page 21). This means that even with a NMP covering the fields in the Water Quality Trade Agreement the uncertainty factor will remain at 3 for any fields that have a phosphorus index (PI) greater than 6 lbs/acre/year. Based on information provided in the SnapPlus files thus far, fields 4 and 7 have a PI greater than 6. The following table shows the calculations involved to arrive at the currently approvable amount of credits:

Field Name	Acres	No Cover Crop	With Cover Crop	Reduction	Post Cover Crop PI	Applicable trade ratio after NMP	WQT Credits
		(lb P/yr)	(lb P/yr)	(lb P/yr)			(lb P/yr)
3	8	20	12	8	1.5	2.4	3.33
4	8	53	52	1	6.5	3.4	0.29
5	11	48	47	1	4.3	2.4	0.42
7	20	151	147	4	7.4	3.4	1.18
9	3	29	17	12	5.7	2.4	5.00
Grandmas	18	84	63	21	3.5	2.4	8.75
North Pasture	5	16	12	4	2.4	2.4	1.67
Oak Tree	18	125	92	33	5.0	2.4	13.75
West Barn	23	70	52	18	2.3	2.4	7.50
Total	114	596	494	102			41.9

The WDNR conditionally approves the WQT Plan as a basis for water quality trading during the next WPDES permit term. The WDNR has assigned the WQT plan a tracking number of WQT-2020-0002 and will be referenced as such in the draft WPDES permit. The final WQT plan will be included as part of the public notice package for permit reissuance. The draft WPDES permit will include a requirement for an annual trading report and effluent monitoring for total phosphorus.

If you have any questions or comments, please contact me at (414)-263-8623 or at nicholas.lent@wisconsin.gov

Thank You,

Nick Lent

Nick Lent

Wastewater Engineer

Wisconsin Department of Natural Resources

e-CC:

Leo Kucek, Applied Technologies

Lisa Creegan, WDNR

Matt Claucherty, WDNR

Jacob Wedesky, WDNR

Bryan Hartsook, WDNR