State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 3911 Fish Hatchery Road Fitchburg WI 53711-5397

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September 15, 2015

Tom Steinbach, Operations Manager Oconomowoc Wastewater Treatment Plant 900 S Worthington St Oconomowoc WI 53066

Subject:

Oconomowoc Wastewater Treatment Plant (WWTP) Adaptive Management Plan

WPDES Permit #WI-0021181-08
CONDITIONALLY APPROVING

Dear Mr. Steinbach:

Thank you for submitting a revised draft of an Adaptive Management Plan on behalf of the City of Oconomowoc WWTP and Municipal Separate Storm Sewer System (MS4). This report was submitted as the chosen option to pursue final phosphorus limit compliance. The revised plan was received on August 7, 2015. The Department has reviewed the report and is approving the plan with the following conditions. The conditions are broken up into three categories: corrections needed, questions to address and additional comments.

CORRECTIONS NEEDED

- 1. Page 2: The point of compliance for the overall adaptive management project is listed as the end of reach 27; reach 25 also needs to be monitored to confirm the impact of practices in the reach where the permitted MS4 is located. Reach 25 is already included as part of the monitoring strategy but the following language should be included regarding ultimate compliance for the City of Oconomowoc MS4.
 - a. If, at the end of the adaptive management project, in-stream compliance has not been met at the end of reach 27, the MS4 can still be compliant with the goals of the TMDL if the in-stream monitoring shows Water Quality (WQ) goals have been met in reach 25.
 - b. If, at the end of the adaptive management project, the in-stream monitoring at both reach 27 and reach 25 does not show compliance with the goals of the TMDL, then modeling can still be used to show the percent reduction for phosphorus has been met in reach 25 for the MS4 system.
- 2. The closest proposed monitoring site to the pour point of reach 25 is #14 which is almost 4 miles upstream at Hwy BB. Monitoring site #14 should still be sampled as it is a good site for a downstream point for the WWTP outfall. However, a monitoring point should be added at Morgan Bridge Road. This site is a little over 1.5 miles upstream of the pour point for this reach and downstream of an additional Unnamed Tributary to the Oconomowoc that converges to the River in between Morgan and Hwy BB. There are significant wetlands downstream of Morgan and access closer to the pour point would be very difficult.
- 3. The compliance point for reach 27 is acceptable, but unless there is access to the neighboring land it may be difficult to get to. Just downstream of the point, it looks as though there is a significant wetland complex (between the Rock River and the Oconomowoc River) that has in the past been significantly flooded. For this reason, the monitoring point should be moved upstream to Northside Drive which is just



approximately 1/2 mile upstream. As there are no other significant inputs in that stretch, it should still be a good representative sample, but provide better access and not be impacted by potential flooding and backwater that could be an input from the Rock River.

- 4. <u>Detailed information on the in-stream compliance points for Reach 27 & Reach 25 should be submitted.</u> A map and spreadsheet are attached, but only include general locational information. This information will be included in the next MS4 permit for the City.
- 5. Page 3: Additional language should be added to clarify the participation of MS4s. At the end of the first paragraph a statement should be added stating that "Reductions per reach 26, 27 and 55 will be met by the City of Oconomowoc MS4 outside of the Adaptive Management Plan (via the percent reduction method)" or include a similar summary for the following reaches:

a. Reach 25: TSS: 59% TP: 74% (adaptive management)

b. Reach 26: TSS: 57% TP: 53%

c. Reach 55: TSS: 66% TP: 77%

d. Reach 27: TSS: 40% TP: 27% (Does not apply, since preliminary mapping shows no portion of the MS4 system operating in / draining to reach 27)

- 6. Page 5 and Page 48: The term "in-kind technical assistance" is used to describe roles of the counties. However, technical support is factored into the financial table, which is labelled as "OWPP Overall Costs". Is the "in-kind" statement incorrect or is this brought into the financial table (Table 18), but the OWPP is not paying for that service? If it is the later, could the table be renamed and made clear that the City will be directly paying for pieces. This could be questioned by others and the clarification should be made.
- 7. Page 9: The Town of Richfield is actually the "Village" of Richfield. <u>Update the list of municipalities as necessary.</u>
- 8. Pages 9-10: The acreage in the tables was not updated to reflect the information stated in the Surface Water Data Viewer. The narrative does refer to the data viewer but the corrections to the tables were not made from the previously submitted plan. The acreage should be updated in the tables.
- 9. Page 11: The proposed 2014 Impaired Waters List was approved in June 2015 and the term should be removed.
- 10. Page 43: In the standards for monitoring it says to use 2 mL of 50% sulfuric acid to fix the samples. WDNR only uses 1 mL in our samples as in almost every case this is sufficient to reach a pH of 2 or less for processing. For those few that need more the state lab of hygiene has told use 2 mL is too much and can over acidify the sample, where only a few drops over the 1 mL is needed and they add if it is necessary. It is suggested that the standard of 1 mL of 50% sulfuric acid be used for preservation.

QUESTIONS TO ADDRESS

- 1. Page 3: How many samples were taken for monitoring site #16 median value and how many were above the standard? Where is the second site just downstream of the outfall?
- 2. Page 4: Where does the statement "It is estimated that without an AM program the City's cost to achieve TP reductions approaches \$10,000,000" come from? Can this be cited from a study?

- 3. Page 5: Have the counties talked to their boards about participating? If so, was a formal resolution of participation been passed? If so, can it be referenced/attached? It demonstrates that these partnerships will last throughout the AM project.
- 4. Page 41: "assuming 3% phosphorus content in TSS..."? Please provide details on what this is referring to.
- 5. Page 43: Are flow samples being taken by Sand County at time of phosphorus sample collection or as their own separate event?
- 6. Page 51: Will the city's storm water management plan (currently under development) be included with the adaptive management plan as an attachment or appendix?

ADDITIONAL COMMENTS

- 1. Page 14: The load reduction target has been updated to incorporate the treatment plant's load; however, the MS4 load was not technically factored in. Because MS4 loads are more similar to NPS loads (I.E. discharge when it rains), and the discharge is a modelled value, we are going to accept this. It should be noted that the offsets may need to be updated/revised based on new information.
- 2. Page 41: Streambank stabilization has not been approved by the storm water program to meet MS4 wasteload allocations. These projects would not be counted toward modelled pollutant reduction estimates in the percent-reduction-through-modeling compliance approach, if the MS4 needs to go down that road after the adaptive management time frame is over.
- 3. Page 40: "Lake Improvement" projects can be a useful tool if they are paired with upstream conservation work. If the conservation efforts are being targeted downstream of the lakes there is not much to be gained so there is a potential disconnect. One technically confusing point is that there multiple practices lumped under the "lake improvement" title. It would be good to get a better sense for which projects will be focused on, especially those used to get to the project milestones in Table 19. This is something that will need to be addressed during plan updates.
- 4. Page 33: Infiltration basins were not listed as a possible management technique. This could be a good addition to the list as phosphorus and TSS can be reduced with this practice and waterways maybe listed for temperature impairments in the future and this maybe another helpful tool in the belt to help these impairments, especially around these Coldwater systems in the area.
- 5. The NOI for the next City of Oconomowoc MS4 permit may require specific projects to be listed that will be completed within the five year permit term (benchmark concept).
- 6. Pages 5-8: The following monitoring resources could be utilized:
 - a. City of Oconomowoc has begun collecting Total Phosphorus, Chlorophyll a & Temperature on Fowler Lake and has been taking clarity readings for years.
 - b. North Lake has been collecting Total P, Chlorophyll a, Temperature & DO levels since the 90's
 - c. Lake Keesus is a long term trend lake and WDNR collects data yearly including TSS and phosphorus.
 - d. Village of Chenequa samples for Total P, Chlorophyll a, Temperature & DO on Pine Lake

- e. Rachel Sabre (WDNR) coordinates with the Citizen Lake Monitoring Network program and can work with some of the lakes on the system that don't currently have volunteers and try to get a monitoring program established.
- f. Jayne Jenks from Waukesha County coordinates and trains volunteers in the county.
- g. Lindsay Albright (WDNR) coordinates stream volunteers with the WAV program.
- 7. Page 33-34: STEPL is an acceptable model to use at this point given the management measures selected, and the fact that a more field-scale model will be used later on.

Within the next 45 days, please submit the corrections needed and answers to the questions to ensure that the conditions of the approval have been met. Note that some adjustments will need to be made to the adaptive management plan in the future based on new information regarding MS4 involvement or management practices. If you have any questions or comments please contact me at 608-275-3258 or at amy.garbe@wisconsn.gov.

Thank you again,

Amy Garbe

Wastewater Engineer

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