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Clear Thinking

January 27, 2015

Mr. Timothy Thompson
DNR, SER Headquarters
2300 N. Martin Luther King Drive
Milwaukee, WI 53212

Subject: Revised Comments on Proposed WPDES Permit Reissuance
WPDES Permit No. WI-0031470-07-0
Norway Town Sanitary District No. 1

Dear Mr. Thompson:

On behalf of our client, the Norway Town Sanitary District No. 1 (District), we are submitting the following comments on the proposed reissuance of the District's WPDES permit.

1. Permit Fact Sheet

The permit fact sheet contains the following mistakes:

- Section 4.1 lists a Maximum Daily effluent limit of 24 mg/l for ammonia – this limit has been eliminated.
- Section 6.1 references a Chloride Target Value of 500 mg/l in multiple places – a target value of 600 mg/l was agreed upon, and is stated correctly in Section 4.1.2 and Section 6.4.

The District requests that the Department revise the fact sheet to correct these mistakes.

2. Ammonia Limits

The ammonia levels in the District's effluent are often below the limits of detection, with the highest recorded ammonia level over the last five years of effluent data being only 0.10 mg/l. A statistical analysis of the District's effluent ammonia levels from the years 2010 – 2014 calculated the following upper 99th percentiles:

- Daily Average: 0.08 mg/l
- 4-day Average: 0.07 mg/l
- 30-day Average: 0.04 mg/l

The Maximum Day ammonia limit of 24 mg/l has been removed from the District's permit, as the Department agreed that there was no reasonable potential to exceed the limit. The District believes that this analysis indicates that there is also no reasonable potential to exceed the weekly and monthly ammonia limits and the Department should consider eliminating these limits as well.

The District is also requesting a reduction in monitoring requirements for ammonia. The measured effluent demonstrates that the District does not have the reasonable potential to exceed the water quality criteria and therefore reduced monitoring is reasonable. We request the monitoring requirement be reduced to a 24-hour flow proportional composite sample in the last calendar year of the permit, similar to other municipal permits that do not have an ammonia limit

3. Phosphorus Limits and Future Development of a TMDL

The District's treatment plant discharges to the Waubeesee Lake Drainage Canal, which flows into the Wind Lake Drainage Canal and eventually into the Fox (IL) River in Racine County. As stated in the WQBEL memo, the Fox River exceeds the phosphorus standard both up- and downstream of the confluence of the Waubeesee/Wind Canal system. The WQBEL memo recommended an interim limit of 1.0 mg/l. It also recommended imposition of more stringent effluent limits based upon the numeric water quality standard. The proposed permit has these more stringent limits taking effect on December 31, 2017 or December 31, 2023, depending on the outcome of the Operational Evaluation Report.

The Fox (IL) River was added to the impaired water list in 2012, which in the future will result in the development of a TMDL for the entire Fox (IL) River Watershed, including the District's discharge into the Waubeesee Lake Drainage Canal. Section 3.2.1.6(C) of the proposed permit states that final limits may be revised based on possible future Fox (IL) River TMDL evaluations. The more stringent limit is based upon the downstream impaired water of the Fox River and DNR's reliance upon the fact that "most of the streams in Southeastern Wisconsin exceed the 0.075 mg/L standard." The DNR did not perform an analysis based upon the District's actual discharge or its actual contribution to the Fox River, an impaired water over seven miles downstream.

The District requests that the Department defer imposition of the more stringent water quality limits based upon the numeric water quality standards while the TMDL is being developed. The District's situation is similar to numerous other dischargers in waterbodies where TMDLs are in development. If a more stringent water quality based effluent limit becomes effective before the TMDL is approved by the EPA, the District may be subject to more stringent limits than are necessary to meet the water quality criterion in the watershed as determined by the TMDL. In order to change the limits, the discharger would have to request limits based upon the TMDL and perform an anti-degradation analysis. Additionally, under the proposed permit, the District is required to prepare an Operational Evaluation Report to meet the more stringent limits. If the TMDL

determines a different limit, either more or less stringent, the District will have to go through this process all over again.

Since the TMDL is a site specific analysis of the water body, it is a more accurate representation of the proper limits for the District's wastewater treatment plant. The District understands the importance of the water quality based effluent limits to address impaired waters in the State, but this limit should be based upon site specific scientific information, not general statewide number water quality criteria. Furthermore, we understand that the Waubeesee Lake and Wind Lake Drainage Canals are not classified as impaired waterways and are not listed on the 303(d) list. We should note that these are man-made agricultural drainage canals that are periodically dredged by the Norway-Dover Drainage District.

The District requests that the DNR wait until after the TMDL has been developed and approved by the EPA to impose a water quality based limit based on the TMDL, since it will be more closely tied to the actual site specific data for the waterbody to which the District discharges. The DNR recently acknowledged in its proposed revisions to the Phosphorus Implementation Guidance that where the point source discharged to a receiving water that flows into a stream/river that exceeds its applicable criteria upstream of the confluence, as it does in this case, that the exceedance in the downstream water is "likely coming from other phosphorus loadings in the watershed" and that the phosphorus limitation should be based upon local water quality concerns (See "Proposed Program Guidance Updates – Phosphorus Implementation Guidance" p. 50.) In this case, there has been no demonstration by the Department that the District has the reasonable potential to exceed the water quality criteria of the waterbody that it discharges to and therefore, the imposition of any more stringent limit should be deferred until the TMDL is developed. Additionally, the District requests that the Phosphorus Compliance Schedule in Section 5.2 of the proposed permit be deferred until after the TMDL process has been completed.

Thank you for the opportunity to submit these comments on behalf of the District. Please contact me if you have any questions.

Sincerely,
Applied Technologies, Inc.

James J. Smith, P.E.

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