

Review of the Proposed 2017 WPDES Permit Renewal

These are a few of the proposed Permit changes which are of significant concern for the District. I will address each separately.

1) Permit Section 3.2.1 Sampling Point 001 - Effluent, Page 1 of list:

An additional limit is added in the Table for Fecal Coliform. It sets a Weekly Ave. limit of 656 #/100 ml for the period May 1 through September 30. This limit is significantly more stringent than the limit of 400 #/100 ml monthly geometric mean included in the current permit and in the draft permit provided to the District for review in late June, prior to the public notice. The District questions the justification for this weekly limit, and the WDNR authority to include this more restrictive limit in the Districts permit.

2) Permit Sections 3.2.1.5 and 5.2 Phosphorus WQBEL Limitations and Compliance Schedule, Page 1 and 2 of list:

During discussions and in presentations given by the WDNR over the past few years, the District has been told it would be given 7 to 9 years to come into compliance with the proposed WQBEL / TMDL limits for phosphorus. In the proposed Permit, as provide by the WDNR, a 4-year compliance schedule is proposed for final compliance with the phosphorus limitations. This is based upon the WDNR belief that the District can achieve compliance without a major facility upgrade. The District contends that this determination has yet to be verified. The District will need adequate time to investigate options such as water quality trading, and effectiveness of facility upgrade options. The District also will need to consider the effect of WPS / Fox Energy continued effluent water use. The District has no assurances that Fox Energy will take any effluent today, tomorrow, or in the future. That decision is Fox Energies, and is based upon market demand and the cost of natural gas. Therefore, the evaluations of HOV effluent phosphorus pounds discharge, for determining the pounds removal required for permit compliance, needs to be analyzed based upon the assumption of no Fox Energy effluent use. This means using the entire HOV effluent flows prior to Fox Energy withdrawal in all calculations. When this analysis is used it becomes apparent that HOV has a daunting task ahead of it in achieving compliance with the proposed phosphorus limits of the new Permit. The District also believes the limit imposed by the WDNR is more "stringent" than is necessary, and requests they provide justification why a limit such as 0.3 mg/L for the District would not be "stringent" enough for this Permit term.

3) Permit Sections 3.2.1 and 3.2.1.8 TMDL Limitations, Page 1d of list:

Again, during discussions and in presentations given by the WDNR over the past few years, the District has been told it would be given 7 to 9 years to come into compliance with the proposed WQBEL / TMDL limits. In the proposed Permit, as provided by the WDNR, immediate implementation, on January 1, 2017, of the Total Suspended Solids TMDL limits are stipulated. The District feels that it is unreasonable to require it to meet these new reduced effluent limits for TSS immediately. Time will be needed to develop a Water Quality Trading program for TSS, or to provide for treatment plant infrastructure improvements to ensure compliance with the new proposed limits. As pointed out above, the District has no control over Fox Energy water use and on days, or periods of no Fox Energy water draw, the District will likely violate the new TSS proposed limits. As a consideration of this immediate TSS requirement, would the WDNR provide a variance to the District for those time periods when the District receives high wet weather flow events, or any time frame when Fox Energy is not drawing water?

I feel all other changes to the new Permit will have little if any effect for the District, or are not significant enough to challenge.

As Director of the District, I will be preparing a letter to the WDNR which will address these concerns. The letter will be forwarded to Amanda Minks, DNR Permit writer, as required, prior to the September 19 Public Hearing.

Review of the Proposed 2017 WPDES Permit Renewal

New Permit

- Page 3, Section 2.1 Sampling Point(s): Sample Point 112 has been added to the table. This in the sample point for reporting diverted flows during high-flow events when blending occurs. This is not a new point, it has been used in the past for sampling and reporting and likely was only added for clarification.
- Page 3, Section 2.2.3 Sampling Point Blending: **New section.** A table is added for the item above, listing monitoring requirements during blending.
- Page 4, Section 2.2.3.1 In-Plant Diversion Flow: **New section.** Same item as above, listing the reporting requirements.
- Page 5, Section 3.1 Sampling Points: Language change indicating a change in the location of the lower Fox River data collection site for Waste load allocation determinations to Appleton Lutz Park Gauge Station.
- Page 5-7, Section 3.2.1 Sampling Points (Outfall) 001- Effluent: Additional limits added to multiple parameters.
Fecal Coliform – An additional limit of 656 lbs/100 ml weekly average.
Chlorine Residual – Weekly and monthly limits of 38 ng/l have been added to the daily limit of the same number.
Total Phosphorus – TMDL limits have been added (effective January 1, 2021) of 10.5 lbs/day, 6-month average, and 31.5 lbs/day monthly average.
Total Suspended Solids – TMDL limits have been added (effective January 1, 2017) of 801 lbs/day monthly average, and 1345 lbs/day weekly average.
Total Mercury – The mercury limit is lowered from 5.5 to 4.8 ng/l.
- Page 8, Section 3.2.1.1 Average Design Flow – A **new section** has been added listing the Districts annual design flow as 8.5 MGD.
- Page 8, Section 3.2.1.5 Phosphorus WQBELs – **New section.** This section list the interim and final phosphorus limitations and effective dates. It also lists alternate methods available to achieve compliance, required request forms and other requirements.
- Page 8, Section 3.2.1.6 Alternate Approaches – **New section.** Presents compliance options to facility upgrading, and states the requirement of permit modification and reissuance. Options include, facility infrastructure upgrade, adaptive management, water quality trading, variance, limit recalculation based upon new information, or DNR modification of Permit.
- Page 9, Section 3.2.1.7 Whole Effluent Toxicity (WET) Testing – Language is added stipulating that no changes in facility operations are allowed during sampling and provides language extending testing requirements after Permit expiration. A requirement for electronic reporting was added.
- Page 10, Section 3.2.1.8 Total Maximum Daily Load (TMDL) Limitations – **New section.** Contains notice of USEPA approval of the TMDL, and lists the new TMDL limits for Total Phosphorus and Total Suspended Solids.

Review of the Proposed 2017 WPDES Permit Renewal (cont)

New Permit

- Page 16, Section 4.2.1 Sampling Point (Outfall) 003 – Liquid Sludge – A requirement for a Municipal Sludge Priority Pollutant Scan, once per Permit term, was added to the Table.
- Page 16, Section 4.2.1.3 Multiple Sludge Sample Points (Outfall) – New section. Language has been added to cover situations where facilities have multiple Sludge outfalls / out-loading sites.
- Page 17, Section 4.2.1.5 Sludge Analysis for PCB and Priority Pollutant Scan – Language is added requiring a sludge priority pollutant scan in 2018.
- Page 20, Section 5.1 Mercury Pollutant Minimization Program – The annual report requirements are expanded to require inclusion of analytical data results from HOV. The third year of the Permit report requires an analysis of feasibility for lowering the pretreatment mercury limitations to reduce the influent mercury loading to the treatment facility. In the fifth year of the Permit, language is added to require HOV to submit a request to continue the mercury variance. The fifth year report must also contain a Pollution Minimization Program (PMP) plan for mercury which is intended to reduce mercury in the HOV influent flows through planned mercury minimization/source reduction activities during the next permit.
- Page 21, Section 5.2 Phosphorus (Less Stringent Effluent Limits) – This **new section** lists the required schedule, with compliance dates, for meeting the WQBELs. This is the proposed schedule and requirements.
- 12/31/2017 – Operational Evaluation Report. Facility effluent evaluation and discharge optimization plan, and/or plan/schedule for compliance with the WQBELs.
 - 12/31/2018 – Submit a Facility Plan which evaluates feasible alternatives to meet the final phosphorus limits.
 - 12/31/2019 – Submit to WDNR, for approval, construction plans and specifications.
 - 06/30/2020 – Submit a progress report on meeting the phosphorus limits.
 - 12/31/2020 – Complete actions to meet the final WQBELs for phosphorus.
 - 01/01/2021 – The new WQBELs become effective. The facility is required to be compliance with the new limits.
- Page 22, Section 6.1.1 Monitoring Results – The requirement to mail in a certification sheet for each DMR report has been removed from the new permit.
- Page 23, Section 6.1.5 Reporting Monitoring Results – A bullet point is added in the new permit indicating that a 2 mg/l, lower reporting limit for BOD and TSS, shall be considered to be the limits of quantitation for calculating NR 101 fees. (I feel this is added to insure the WDNR can collect NR 101 fees after treatment facilities improve effluent quality with new treatment processes to comply with the WQBELs)

Review of the Proposed 2017 WPDES Permit Renewal (cont)

New Permit

- Page 24, Section 6.2.1 Noncompliance Reporting – New Permit language was added to this section which states that a ‘scheduled bypass’, approved by the DNR under the scheduled bypass section shall not be subject to the reporting required in this section.
- Page 25, Section 6.2.6 Bypass – Language was added in the new Permit exempting any scheduled bypass and approved blending, treatment plant overflow, or controlled diversion from the Bypass prohibition. In the second bullet point, language was added stating under what conditions the DNR may approve a bypass.
- Page 25, Section 6.2.7 Scheduled Bypass – The language in the new Permit allows WDNR to approve a scheduled bypass without holding a public hearing.
- Page 25, Section 6.2.8 Controlled Diversions – This is a **new section** outlining the conditions under which a controlled diversion is allowable.
- Page 26, Section 6.2.9 Blending – This **new section** states that blending may occur at HOV. It states that blending may occur only during periods of high flow conditions, and sets requirements for blending as well as monitoring and reporting requirements.
- Page 26, Section 6.3.1.1 Overflow Prohibition – **New section** prohibiting collection system and treatment facility overflows, and lists exceptions.
- Page 27, Section 6.3.1.2 Permittee Response to Overflow – **New section** states that when there are overflows, the facility ‘Emergency Response Plan’ must be followed, per the facility CMOM.
- Page 27, Section 6.3.1.3 Permittee Reporting - **New section** identifying all reporting requirements for sewer overflows and facility overflows. These requirements are not new, but are now identified in the Permit.
- Page 28, Section 6.3.1.4 Public Notification – **New section** stating the requirement that the treatment facility must notify the public of any sanitary sewer, or treatment facility overflows, per its CMOM.
- Page 28, Section 6.3.2 Capacity, Management, Operation and Maintenance (CMOM) Program – **New section** requiring the facility to Verify that it has a CMOM. And requires the facility to keep the document current and ensure it meets the requirements of the CMOM program.
- Page 28, Section 6.3.3 Sewer Cleaning Debris and Materials – A **new section** which lists the disposal requirements for sewer system cleaning materials and debris.
- Page 29, Section 6.4.2 Appropriate Formulas for Effluent Calculations – Expands the section with additional formulas for calculating effluent results to determine compliance with average concentration limits and mass limits and total load limits.

Review of the Proposed 2017 WPDES Permit Renewal (cont)

New Permit

- Page 29, Section 6.4.3 Effluent Temperature Requirements – **New section** adding regulation for effluent average temperature, cold shock standards, and rate of temperature change standards.
- Page 30, Section 6.4.5 Surface Waters Uses and Criteria – A **new permit section** is added to control effluent discharge to surface waters. It lists substances prohibited in effluent discharges, such as floating debris, oil, scum, color, odor, toxic, etc.
- Page 30, Section 6.4.9 Total Residual Chlorine Requirements – A **new section** which set the limit of detection for chlorine, when and what to report for various ng/l test results, and calculation of values for compliance.
- Page 32, Section 6.4.12 Reopener Clause – **New section.** - Contains language providing the WDNR with the ability to modify, revoke and reissue this Permit if it determines an update is necessary for mercury.
- Page 34, Section 6.6.4 Land Application Characteristics Report - A requirement has been added within this section requiring that the facility certify electronically via the 'eReport Certify' web page, with the Characteristic Form 3400-49 and Lab Report.
- Page 35, Section 6.6.7 Annual Land Application Report – Language is added to this section with a requirement that exception sludge (class A) will need to submit annual 'Land Application Report 3400.55' electronically.
- Page 36, Section 6.6.8 Other Methods of Disposal or Distribution Report – Language is added requiring Report Form 3400-52 be submitted annually, electronically, and be submitted even if no sludge is hauled in the year.
- Page 38, Section 7 Summary of Reports Due – Six new reports and/or due dates are listed as required. They all pertain to the new requirements for compliance with the Phosphorus WQBELs.