MEMO

TO: District Commissioners

FR: District Director

Path to Permit Compliance:

September 18, 2016 – DNR Public Hearing on the proposed HOVMSD Permit renewal.

- HOV negotiated the extension of the compliance schedule for Total Phosphorus from a 4 year term to a 7 year time frame.
- Negotiated the postponement of the Total Suspended Solids (TSS) compliance schedule from immediate compliance (1/1/2017) to a time, up to one year later. This is conditioned upon HOV submitting a draft "Water Quality Trading Plan" (WQT) to the DNR by the end of the September. This deadline was met. The trading plan calls for the construction of a wetland enhanced sediment retention basin in a field drainage way on District farmland. The pond is designed to settle out TSS from field drainage, and provide "interim" TSS credits to HOV for a five year period.

Going Forward:

Total Suspended Solids:

- The Fox Wolf Watershed Alliance (FWWA), Outagamie County Land Conservation (OCLCO), and Heart of the Valley MSD (HOV) are working together to prepare and submit a "Final" Water Quality Trade Plan to DNR. Once the final plan is approved by DNR and EPA, construction of the retention basin can begin.
- Once constructed, the basin will require frequent monitoring, as spelled out in the Trade Plan.
- The trading credits should become available to HOV as soon as the basin construction is completed and the system is operational.
- Use of the TSS credits: Once the credits are available, HOV will need to indicate, on the monthly DMR, the number of TSS credits it intends to use each month. This is to be based upon the pounds of TSS in the HOV effluent in excess of what is allowed in the new Permit for the month. If the HOV effluent does not exceed the limit in any given month, no credits would be used.
- On October 25, 2016 a meeting was held with DNR, FWWA, OCLCO, and HOV to review the "draft" Water Quality Trading Plan. At that meeting, suggested improvements to the plan were discussed. Changes are being made to the draft document with a goal of having a new "draft" prepared by November 18th, and a "final" plan ready for approval by years end.
- Because of the time needed to provide for the additional information and changes to the draft plan, the DNR is pushing back the issuance of the HOV WPDES Permit to April 1, 2017. The "Final" Water Quality Trading plan will be approved by that date, and its effect on parts of the Permit can then be included in the new Permit language.
- The change in the due date for the WQT will also push back the timeline for completion of construction of the retention basin to September 2017.
- The change in the permit issuance date also pushes back the date at which time the total suspended solids limit in the new permit must be met from December 2017 to April 2018.

Total Phosphorus:

- Once the new Permit is issued, HOV will need to review the compliance schedule contained in the Permit. Then HOV will need to determine if it has the ability to prepare the annual reports required in the Permit, or if it will need to obtain assistance from an Engineering / Consulting firm for this process.
- HOV should continue to work with Fox Wolf Watershed Alliance, and the Outagamie Land Conservation Office toward additional Water Quality Trading opportunities for total suspended solids and total phosphorus. (also, possibly total nitrogen in the future).
- With the phosphorus limit compliance requirement pushed back for 7 years, HOV has time to attempt to work with Fox Energy / WPS to secure a water use agreement where Fox Energy would consistently take HOV effluent (whether for cooling purposes, or simply to assist HOV with permit compliance). Also, inquire of Fox Energy if they might have any room under their phosphorus limit, and if they do, would they consider selling them as credits to HOV.

Infrastructure Options:

HOV should continue to search for and evaluate existing and new technologies available for
effluent nutrient and solids removal. Consideration must be given to the limited space available
at the treatment plant site, as well as total cost of process additions and operating expenses.

Concepts and Ideas:

HOV can investigate these and other options for future compliance with the upcoming total phosphorus, total suspended solids, and other future anticipated limits.

- Tertiary filtration with enhancements such as chemical addition, and/or variations in type of filtration such as "deepbed" filtration.
- Disc filtration systems
- Water Quality Trading (Interim and permanent benefit trades)
- Request a variance from DNR
- Rare Earth Chemical (SorbX) addition, and settling in old Chlorine Contact Tank
- Rare Earth Chemical (SorbX) addition, and Tertiary filtration.
- Polishing basins

Others