State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
FAX 608-267-3579
TTY Access via relay - 711

WISCONSIN
DEPT. OF NATURAL RESOURCES

Ms. Tinka Hyde, Director, Water Division
U.S. EPA, Region 5
77 W. Jackson Boulevard
Chicago, IL 60604

Subject: Request for Approval of a Variance from Water Quality Standards for Chloride
Receiving Stream: Wetland to an Unnamed Stream into Moon Creek within the Hay River Watershed in the Lower Chippewa Drainage Basin in Barron County.
Permittee: Village of Turtle Lake, WI-0025631-10-1

Dear Ms. Hyde:

In accordance with s. 283.15 of the Wisconsin Statutes and Title 40, Part 131 of the Code of Federal Regulations, the Department requests U.S. EPA, Region 5 to approve a water quality standards variance for the above-referenced discharge. The water quality criterion for which the permittee is seeking a variance is contained in chapter NR 105, Wisconsin Administrative Code.

To assist your staff during their review, relevant background information pertaining to this variance is attached to this letter. The draft permit and variance were publicly noticed on February 20, 2014. The comment period has now ended. No comments from the public have been received related to the variance.

We are committed to working with the permittee during the term of this variance to find a solution that will lead to full compliance with the applicable water quality standard. Conditions on the variance, which are included in the WPDES permit, specify actions to be taken by the permittee and timetables for those actions. If the variance is approved by EPA, the Department will include the variance limitation and related conditions in the final WPDES permit.

We appreciate your consideration of this request. Should you have further questions regarding this matter, please contact Sheri Snowbank at 715-635-4131.

Sincerely,

Russell A. Rasmussen, Administrator
Water Division

DATED: 5/11/15

Attachment
e-cc Michelle Balk – WDNR Spooner
David Pfeifer - EPA, Region 5

BACKGROUND INFORMATION REGARDING WATER QUALITY STANDARDS VARIANCE

Receiving Stream and Classification: Wetland to an Unnamed Stream into Moon Creek within the Hay River Watershed in the Lower Chippewa Drainage Basin in Barron County. The wetland is designated as Limited Aquatic Life waters. The unnamed stream and Moon Creek are classified as Fish and Aquatic Life.

Criterion: 395 mg/L chronic toxicity criterion in ch. NR 105, Wis. Adm. Code

Water Quality Based Effluent Limit: 400 mg/L

Permit Limit Based on Proposed Variance: Interim Limit: 920 mg/L; Target Limit: 830 mg/L

Duration of Variance: From the effective date of the permit modification through the end of the permit term (June 30, 2019).

Department Rationale for Approving Variance:
S. NR 106.83(2), Wis. Adm. Code, outlines findings that justify expediting variances chloride. More specifically:

a) The Department considers treating these large volumes to produce effluent that reliably meets the water quality-based effluent limit to be prohibitively expensive. See Section VII of the Facility Specific Standard Variance Data Sheet for clarification.
b) End-of-pipe wastewater treatment technology for chloride produces concentrated brine that can be as much or more of a liability than the untreated effluent. Since the concentrated brine cannot be further treated, the only recourse for the disposal of the brine is transfer to another community, which is often not feasible.
c) Appropriate chloride source reduction activities are preferable environmentally to effluent end-of-pipe treatment in most cases, since the end product of treatment (production of a concentrated brine) does not remove the load of chloride from the environment.
d) For some dischargers, attaining the water quality-based effluent limit for chloride may cause substantial and widespread adverse social and economic impacts in the area where the discharge is located.

The Department concludes that the applicant has met the requirements of Subchapter VII of ch. NR 106, Wis. Adm. Code, and s. 283.15, Wis. Stats. The Department further concludes that requiring the applicant to meet the water quality standard for chloride at this time would result in substantial and widespread adverse social and economic impacts. The Department therefore proposes to grant the variance for chloride.

Conditions to be Included in WPDES Permit: **See Draft Permit being sent to EPA in Electronic Format.**

Attachments:
Facility Specific Standard Variance Data Sheet
Certification from DNR Chief Legal Counsel