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WISCONSIN
DEPT. OF NATURAL RESOURCES

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

Subject: Request for Approval of a Variance from Water Quality Standards for Mercury
Receiving Stream: Rock River in Rock County
Permittee: City of Beloit - WPDES Permit No. 0023370-09

Dear Ms. Hyde:

In accordance with § 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 18, 2015. The comment period has now ended. The City of Beloit submitted comments on the public noticed permit on March 18, 2015; however, the comments did not pertain to the permittee's request for a mercury variance.

We are committed to working with the permittee during the term of this variance to find a solution that will lead toward 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 Phillip Spranger at 608-273-5969.

Sincerely,

Russell A. Rasmussen, Administrator
Water Division

DATED: April 2, 2015

Attachment
e-cc Amy Garbe – SCR/Fitchburg
David Pfeifer - EPA, Region 5

BACKGROUND INFORMATION REGARDING WATER QUALITY STANDARDS VARIANCE

Receiving Stream and Classification: **Rock River in Rock County, Warmwater Sport Fish Non-public water supply**

Water Quality Based Effluent Limit: **1.3 ng/L as a monthly average**

Existing Permit Limit: **3.6 ng/L as a daily maximum**

Permit Limit Based on Proposed Variance: **3.3 ng/L as a daily maximum**

Duration of Variance: **From the date of permit reissuance through the proposed permit expiration date of June 30, 2020 the limit of 3.3 ng/L would be in effect as a variance limit.**

Department Rationale for Approving Variance:
S. NR 106.145, Wis. Adm. Code, outlines findings that justify expediting variances mercury. The Department intended that this provision be generally applicable to municipal and industrial dischargers, which produce large volumes of effluent with already extremely low mercury concentrations. 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) At the time of promulgation of s. NR 106.145 in October 2002, data on mercury concentrations in wastewater effluents were generally not available. However, after the promultation of EPA Method 1631, and beginning in 2006, the permittee began generating low-level mercury data on samples of its effluent, showing that although the facility is properly operated and maintained, the WQBELs are not being consistently achieved.
c) Appropriate mercury source reduction activities are environmentally preferable to wastewater treatment technology in many cases because wastewater treatment for mercury produces a sludge or other resultant wastewater stream that can be as much or more of an environmental liability than the untreated effluent.

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 mercury at this time would result in substantial and widespread adverse social and economic impacts. The Department therefore proposes to grant the variance for mercury.

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

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