

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

WN-16J

SEP 04 2014

Mr. Russ Rasmussen Administrator, Water Division Wisconsin Department of Natural Resources 101 S. Webster Street Madison, WI 53702

Re: Waukesha Return Flow

RECETY ED

SEP 10 2014

DNR OFFICE OF THE SECRETARY

Dear Mr. Rasmussen:

Thank you for your letter of July 17, 2014 raising several questions and issues regarding the requirements that would apply to the NPDES discharges from the Waukesha WWTP if the discharge were to be relocated to the Root River. As you know, Waukesha is interested in beginning to use Lake Michigan water as a source of drinking water, and if the City does this, it will need to have the return flows go back into the Lake Michigan Basin. Our preliminary responses to the questions and issues you raised are summarized below. It may be worthwhile for our agencies to discuss these matters further in a conference call.

- 1. Permitting for a new NPDES discharge to an impaired water. As you noted in your letter, pursuant to NR 217 and EPA regulations, a new discharge of a pollutant(s) that would add loadings to a water body already identified as impaired for that pollutant(s) would only be approvable in one of two circumstances:
  - The effluent limits for the pollutant(s) of concern are consistent with a wasteload allocation(s) included in an approved TMDL (or a TMDL-like water quality analysis) for the impaired water body; or
  - The discharge is below the in-stream criteria for that pollutant(s). In your July 17 letter and in EPA's approval letter of NR 217 (July 25, 2012) we have noted that the discharge should be "well below criteria." This provides a margin of safety, which is appropriate in the absence of a water body-specific water quality analysis.

You laid out in your July 17 letter some specific details about the water quality analysis that would need to be carried out, should Waukesha pursue that approach, and about how WDNR would determine an appropriate effluent limit that would be "well below criteria." EPA agrees with the approaches and decision criteria for the Waukesha situation which you summarized in your letter. Should Waukesha choose to do a TMDL-type analysis that would of course be subject to the approval of WDNR. The City would

need to take into account all the point and nonpoint source loadings, and have a scientifically valid approach for determining wasteload allocations (WLAs) for the point sources. If this analysis is done properly, it could potentially serve as the basis for a formal TMDL which WDNR could submit to EPA for approval. The TMDL could then be used to help guide nonpoint source projects and to establish permit limits for other permittees in the Root River watershed. The WLAs for the other point sources would need to be achieved for the TMDL-like analysis to lead to restoration of the water body.

- 2. TMDL Analysis. As noted above, Waukesha would have the option of developing a formal TMDL that would need to be in conformance with all applicable requirements, or the City could complete a TMDL-like analysis. We anticipate that 40 CFR 132, Appendix F, procedure 3 would be applicable in this situation. We foresee that the TMDL-like approach would involve water quality analyses very similar to what would be done as part of a formal TMDL.
- 3. <u>Demonstrate Compliance through Trading</u>. EPA agrees that Waukesha potentially would have the option to use trading as a component of its program to control phosphorus. As you noted, the reductions achieved as a result of a trade(s) could potentially be used to make up the difference between the City's actual discharge and the effluent limits developed in accordance with 1., above.
- 4. <u>Background Level of Arsenic in Lake Michigan</u>. We agree that WDNR must take into account the arsenic criteria applicable to Lake Michigan in developing Waukesha's permit limits. As for your more specific questions regarding the arsenic concentrations in the Lake and in the discharge, we recommend that we discuss these topics in a conference call. There are a number of legal and environmental considerations that come into play, and we feel a detailed conversation about these issues is warranted.
- 5. <u>Antidegradation</u>. We share WDNR's view that the return flow could cause a significant lowering of water quality. This being the case, Waukesha would need to complete an antidegradation analysis.

Thank you for the work you have done to evaluate options and requirements for Waukesha's return flow discharges, and for reaching out to confer with EPA on these important questions. If you would like to convene a conference call to discuss any of the topics addressed in this letter we would be happy to participate in the discussions.

Sincerely,

Tinka G. Hyde

Director, Water Division