STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NOTICE OF FINAL DETERMINATION TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT No. WI-0022918-09-0

Permittee: CITY OF LODI, 130 South Main Street, Lodi, WI, 53555

Facility Where Discharge Occurs: Lodi Wastewater Treatment Facility, 707 FAIR STREET, LODI, WISCONSIN

Receiving Water And Location: Spring Creek (Lake Wisconsin Watershed, LW19 – Lower Wisconsin River Basin) in Columbia County (NE ¼ of NW ¼ of Section 27, T10N-R8E – Lat: 43.3125 / Long: -89.5318)

Brief Facility Description: The City of Lodi operates a secondary wastewater treatment plant with chemical phosphorus removal serving a population of approximately 3,100. The wastewater is primarily residential in nature, with some commercial and industrial contributors. Average effluent flow is approximately 0.34 MGD and the current design flow is 0.542 MGD. Lodi’s treatment facility includes: raw influent screening, primary settling, packed media tower and rotating biological contactor secondary treatment, final clarification, seasonal effluent disinfection using ultraviolet light and cascade effluent aeration. Solids produced are thickened using a gravity belt thickener prior to anaerobic digestion and storage. Biosolids are spread on Department approved fields at the agronomic needs of the crop. The permittee has been found to be in substantial compliance with its current permit.

For this permit term, Lodi will implement a Department-approved Adaptive Management Plan to pursue final phosphorus limit compliance. This effort will involve close partnerships with Columbia County Land & Water Conservation Department (LWCD) and Dane County LWCD in an effort to reduce in-stream phosphorus concentrations in Spring Creek.

Permit Drafter’s Name, Address and Phone: Phillip Spranger, DNR, SCR Headquarters, 3911 Fish Hatchery Rd, , Fitchburg, WI, 53711, (608) 273-5969

Basin Engineer’s Name, Address, and Phone: Doris Thiele, N7725 Highway 28, Horicon, WI 53032, (920) 387-7864

Date Permit Signed/Issued: December 29, 2016
Date of Effectiveness: January 1, 2017
Date of Expiration: December 31, 2021

Following the public notice period the Department has made a final determination to reissue the WPDES permit for the above-named permittee for this existing discharge. The permit application information from the WPDES permit file, comments received on the proposed permit and applicable Wis. Adm. Codes were used as a basis for this final determination.

The Department has the authority to issue, modify, suspend, revoke and reissue or terminate WPDES permits and to establish effluent limitations and permit conditions under ch. 283, Stats.

Following is a summary of significant comments and any significant changes which have been made in the terms and conditions set forth in the draft permit:

Comments Received from the Applicant, Individuals or Groups and Any Permit Changes as Applicable

The following comments were received by email from Mr. Patrick Morrow, MSA Professional Services on December 20, 2016.

Preface to the Department’s Responses to Lodi’s public comments on its public noticed WPDES Permit: It is important to note that Lodi’s Adaptive Management Plan is incorporated in its entirety into Lodi’s proposed WPDES permit. The plan, dated August 2016 and assigned by the Department Adaptive Management Plan No. WQT-2016-0003, is referenced repeatedly in subsection 2.2.1.3 “Phosphorus Limitation(s)” of the public noticed permit and again in subsection 2.2.3.2 “Reporting surface Water Sampling Results for Total Phosphorus and Flow”. As stated in subsection 2.2.1.3 of the public noticed permit: “Failure to implement the terms and conditions of this section is a violation of this permit.”

Lodi Comment #1: The permit requires that the City of Lodi measure the streamflow downstream of the outfall on a biweekly basis from May 1 through October 31 for each day that a phosphorus sample is collected. We request that this requirement be removed from the permit. The City acknowledges that the measurement of streamflow is useful for assessing the mass of phosphorus traveling through the system, however, permit compliance via Adaptive Management is based upon stream concentrations attaining the 0.075 mg/L water quality criterion. The City will, if economically and practically feasible, monitor streamflow downstream of the outfall.

Department Response to Lodi Comment #1: Subsections NR 217.18(3) and NR 217.18(3)(a), Wis. Adm. Code, state in part that: “At a minimum, the permit shall include the following: Monitoring in the receiving water at locations and times established in the permit to assess phosphorus loading and to document progress toward achieving the applicable phosphorus criterion in s. NR 102.06.” Lodi must measure the streamflow downstream of the treatment plant outfall in order to assess phosphorus loading in the receiving water. Additionally, it is important that the City provide these data to the Department in a
timely fashion, and the Department finds that submitting these data through their eDMR reporting is the most straight-forward and consistent way to ensure timely and accurate data submittals. No changes will be made to the permit in response to Lodi Comment #1.

**Lodi Comment #2:** The permit requires that the City of Lodi calculate and report the total mass of phosphorus downstream from the outfall based upon biweekly stream flow measurements and biweekly grab samples [of in-stream phosphorus concentrations]. We request that this requirement be removed from the permit. The City acknowledges that the calculation of phosphorus mass is useful for assessing the mass of phosphorus traveling through the system, however, permit compliance via Adaptive Management is based upon stream concentrations attaining the 0.075 mg/L water quality criterion downstream of the outfall. The City will, if economically and practically feasible, collect the information necessary to calculate the mass of phosphorus traveling through the system.

**Department Response to Lodi Comment #2:** Subsections NR 217.18(3) and NR 217.18(3)(a), Wis. Adm. Code, state in part that: "At a minimum, the permit shall include the following: Monitoring in the receiving water at locations and times established in the permit to assess phosphorus loading and to document progress toward achieving the applicable phosphorus criterion in s. NR 102.06." Lodi must collect in-stream phosphorus concentrations and have a basis for estimating flow in order to assess phosphorus loading in the receiving water. Biweekly phosphorus sampling is consistent with Chapter 3 of Lodi’s adaptive management plan (page 16) which states that: “This sampling protocol [bi-weekly in-stream phosphorus sampling upstream and downstream of the treatment plant outfall] was started in 2015 and will continue throughout of [sic] the life of the Adaptive Management Project.” A similar statement can be found in “Chapter 7 – Monitoring” of Lodi’s Adaptive Management Plan. No changes will be made to the permit in response to Lodi Comment #2.

**Lodi Comment #3:** The permit indicates that the City of Lodi will voluntarily measure the streamflow upstream of the outfall. We request that this be removed from the permit. The City acknowledges that the measurement of streamflow is useful for assessing the mass of phosphorus traveling through the system, however, permit compliance via Adaptive Management is based upon stream concentrations attaining the 0.075 mg/L water quality criterion. The City will, if economically and practically feasible, monitor streamflow downstream of the outfall.

**Department Response to Lodi Comment #3:** The collection of streamflow upstream of the treatment plant outfall is relevant to s. NR 217.18(3)(a), Wis. Adm. Code, as streamflow measurement is necessary to “assess phosphorus loading.” The purpose of including this “voluntary” monitoring in Lodi’s permit is to emphasize that streamflow monitoring conducted upstream of the treatment plant outfall must be reported to the Department on electronic Discharge Monitoring Forms (eDMRs) when such monitoring occurs. The Department finds that submitting these data through their eDMR reporting is the most straight-forward and consistent way to ensure timely and accurate data submittals. No changes will be made to the permit in response to Lodi Comment #3.

**Lodi Comment #4:** The permit indicates that the City of Lodi will voluntarily measure the phosphorus concentration upstream of the outfall on a biweekly basis. While the Adaptive Management Plan indicated this would occur, permit compliance via Adaptive Management is based upon stream concentrations attaining the 0.075 mg/L water quality criterion downstream of the outfall. As a result, we request that this requirement be removed from the permit. The City will, if economically and practically feasible, collect grab samples [of in-stream phosphorus concentrations] upstream of the outfall on a biweekly basis.

**Department Response to Lodi Comment #4:** This sampling, while made voluntary in the permit, is consistent with Lodi’s Adaptive Management Plan No. WQT-2016-0003, as acknowledged in the comment itself (“While the Adaptive Management Plan indicated this would occur…”). The collection of instream phosphorus concentrations upstream of the treatment plant outfall is relevant to s. NR 217.18(3)(a), Wis. Adm. Code, as phosphorus concentration is necessary to “assess phosphorus loading.” The purpose of including this “voluntary” monitoring in Lodi’s permit is to emphasize that in-stream phosphorus monitoring conducted upstream of the treatment plant outfall must be reported to the Department on eDMRs and via the Department’s Laboratory Data Entry System when such monitoring occurs. No changes will be made to the permit in response to Lodi Comment #4.

**Lodi Comment #5:** The permit indicates that the City of Lodi calculate and report the total mass of phosphorus upstream from the outfall based upon voluntary biweekly stream flow measurements and biweekly grab samples [of in-stream phosphorus concentrations]. We request that this be removed from the permit. The City acknowledges that the calculation of phosphorus mass is useful for assessing the mass of phosphorus traveling through the system, however, permit compliance via Adaptive Management is based upon stream concentrations attaining the 0.075 mg/L water quality criterion downstream of the outfall. The City will, if economically and practically feasible, collect the information necessary to calculate the mass of phosphorus traveling through the system.

**Department Response to Lodi Comment #5:** The calculation and reporting of the total mass of phosphorus upstream of the treatment plant outfall is relevant to s. NR 217.18(3)(a), Wis. Adm. Code, as the total mass of phosphorus is necessary to “assess phosphorus loading.” The purpose of including this
“voluntary” reporting in Lodi’s permit is to emphasize the total mass of phosphorus upstream from the treatment plant outfall must be reported to the Department on eDMRs when such data is generated. No changes will be made to the permit in response to Lodi Comment #5.

**Lodi Comment #6:** The permit indicates that the City of Lodi will voluntarily measure and report the phosphorus concentration and streamflow downstream of the outfall on a per event basis from November 1 through April 30 annually. Since permit compliance via Adaptive Management is based upon data collected from May 1 through October 31, we request that this be removed from the permit.

**Department Response to Lodi Comment #6:** The purpose of including this “voluntary” monitoring in Lodi’s permit is to emphasize that in-stream phosphorus monitoring conducted upstream of the treatment plant outfall must be reported to the Department on eDMRs and via the Department’s Laboratory Data Entry System when such monitoring occurs. No changes will be made to the permit in response to Lodi Comment #6.

**Lodi Comment #7:** The permit indicates that the City of Lodi will voluntarily calculate and report the mass of phosphorus downstream of the outfall on a per event basis from November 1 through April 30 annually. Since permit compliance via Adaptive Management is based upon data collected from May 1 through October 31, we request that this be removed from the permit.

**Department Response to Lodi Comment #7:** The calculation and reporting of the total mass of phosphorus upstream of the treatment plant outfall is relevant to s. NR 217.18(3)(a), Wis. Adm. Code, as the total mass of phosphorus is necessary to “assess phosphorus loading.” The purpose of including this “voluntary” reporting in Lodi’s permit is to emphasize that the total mass of phosphorus upstream from the treatment plant outfall must be reported to the Department on eDMRs when such data is generated. No changes will be made to the permit in response to Lodi Comment #7.

**Lodi Comment #8:** The permit indicates that the City of Lodi will voluntarily measure and report the phosphorus concentration and streamflow upstream of the outfall on a per event basis from November 1 through April 30 annually. Since permit compliance via Adaptive Management is based upon data collected from May 1 through October 31, we request that this be removed from the permit.

**Department Response to Lodi Comment #8:** The purpose of including this “voluntary” monitoring in Lodi’s permit is to emphasize that any in-stream phosphorus monitoring conducted upstream of the treatment plant outfall must be reported to the Department on eDMRs and via the Department’s Laboratory Data Entry System when such monitoring occurs. No changes will be made to the permit in response to Lodi Comment #8.

**Lodi Comment #9:** The permit indicates that the City of Lodi will voluntarily calculate and report the mass of phosphorus upstream of the outfall on a per event basis from November 1 through April 30 annually. Since permit compliance via Adaptive Management is based upon data collected from May 1 through October 31, we request that this be removed from the permit.

**Department Response to Lodi Comment #9:** The calculation and reporting of the total mass of phosphorus upstream of the treatment plant outfall is relevant to s. NR 217.18(3)(a), Wis. Adm. Code, as the total mass of phosphorus is necessary to “assess phosphorus loading.” The purpose of including this “voluntary” monitoring in Lodi’s permit is to emphasize that the total mass of phosphorus upstream from the treatment plant outfall must be reported to the Department on eDMRs when such data is generated. No changes will be made to the permit in response to Lodi Comment #9.

**Comments Received from EPA or Other Government Agencies and Any Permit Changes as Applicable**

No comments received.

As provided by s. 283.63, Stats., and ch. 203, Wis. Adm. Code, persons desiring further adjudicative review of this final determination may request a public adjudicatory hearing. A request shall be made by filing a verified petition for review with the Secretary of the Department of Natural Resources within 60 days of the date the permit was signed (see permit signature date above). Further information regarding the conduct and nature of public adjudicatory hearings may be found by reviewing ch. NR 203, Wis. Adm. Code, s. 283.63 Stats., and other applicable law, including s. 227.42, Stats.

Information on file for this permit action may be inspected and copied at either the above named permit drafter’s address or the above named basin engineer’s address, Monday through Friday (except holidays), between 9:00 a.m. and 3:30 p.m. Information on this permit action may also be obtained by calling the permit drafter at (608) 273-5969 or by writing to the Department. Reasonable costs (usually 20 cents per page) will be charged for copies of information in the file other than the public notice and fact sheet. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.