INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

April 12, 2024

VIA ELECTRONIC MAIL

Mr. Patrick Howell, Superintendent
City of Kendallville
501 W. Wayne Street
Kendallville, Indiana 46755

Dear Mr. Howell:

Re: Preliminary Effluent Limitations
City of Kendallville Wastewater Treatment Plant
NPDES Permit No. IN0020656
Noble County

This letter is in response to your January 30, 2024 request for preliminary effluent limitations for a proposed outfall relocation, current Outfall 003, for the City of Kendallville Wastewater Treatment Plant (WWTP). As indicated in your request, the average design flow of the WWTP will remain 2.68 MGD. The current outfall discharges just upstream of Bixler Lake. This proposal would relocate the outfall to just downstream of the outlet of Bixler Lake. The proposed discharge location will be to Bixler Lake Ditch, Lat. 41° 26' 59'' N, Long. 85° 16' 48'' W. The $Q_{7,10}$ low-flow of the receiving stream at the point of discharge is considered to be 0 cfs.

The following effluent limits are based on Best Available Demonstrated Control Technology (BADCT) for the treatment of sanitary wastewater and are appropriate for the aforementioned bio-mechanical wastewater treatment plant with an average design flow of 2.68 MGD with continuous discharge to Bixler Lake Ditch:

Table 1

Parameter	Summer		Winter		Units
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	
$CBOD_5$	10	15	10	15	mg/l
TSS	12	18	12	18	mg/l
Phosphorus	1.0	----	1.0	----	mg/l

Table 2

Parameter	Daily Minimum	Monthly Average	Daily Maximum	Units
pH	6.0	----	9.0	s.u.
Dissolved Oxygen	6.0	----	----	mg/l
E. coli	----	125	235	count/100mL

Table 3

Parameter	Summer		Winter		Units
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Ammonia-N	1.3	2.9	1.3	2.9	mg/l

327 IAC 2-1.3 outlines the state's Antidegradation Standards and Implementation Procedures. According to 327 IAC 2-1.3-1(b), the procedures apply to a proposed new or increased loading of a regulated pollutant to surface waters of the state from a deliberate activity subject to the Clean Water Act, including a change in process or operation, that will result in a significant lowering of water quality. **As the proposed activities would not result in a significant lowering of water quality, the Antidegradation Standards and Implementation Procedures do not apply.**

For the above referenced discharge scenario, the following requirements will apply: Flow must be measured. The mass limits for parameters are calculated by multiplying the average design flow (in MGD) by the corresponding concentration value and by 8.345. Summer effluent limitations apply from May 1 through November 30 of each year. Winter effluent limitations apply December 1 through April 30 of each year.

The effluent limitations for *E. coli* are 125 count/100 mls as a monthly average calculated as a geometric mean and 235 count/100 mls as a daily maximum. The *E.coli* limits apply from April 1 through October 31 of each year.

The BADCT limits/lake discharger limits set forth in this letter are based on the Indiana water quality standards in effect at this time and may not be the final limits once the NPDES permit is issued. If the water quality standards are modified by the Water Pollution Control Board and new water quality standards become effective prior to the date the NPDES permit for your facility is actually issued, then the IDEM is required by law to issue the NPDES permit with limits based on the new standards.

Also, note that these BADCT limitations only reflect the typical conventional pollutants. Since the wastestream has not been fully characterized, IDEM reserves the right to establish effluent limitations for additional pollutant parameters as deemed necessary. This letter does not guarantee the approval of any permits.

If you have any questions regarding construction permits associated with the proposed facility upgrade, please contact Ms. Missy Nunnery at 317-232-5579. The NPDES permit modification will not be issued to reflect the upgrade until the

construction permit is finalized. At a minimum, the modification request should be submitted at least 180 days prior to completion of the upgrade activities. Please be advised that the modification request must be accompanied by a $50.00 fee in accordance with IC 13-18-20-12.

If there are any questions regarding the antidegradation requirements or NPDES permit requirements, please feel free to contact Jay Hanko at Jhanko@idem.IN.gov or 317/233-0704.

Sincerely,

Leigh Voss

Leigh Voss, Chief
Municipal NPDES Permits Section
Office of Water Quality

Enclosures

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

Date: March 11, 2024

To: File

Thru: Leigh Voss, Chief
Municipal NPDES Permits Section
John Donnellan, Reviewer
Municipal NPDES Permits Section

From: Jay Hanko
Municipal NPDES Permits Section

Subject: Stream Characterization Report for Kendallville WWTP in Nobel County (Proposed, WLA 002754; IN0020656)

A stream characterization was conducted in support of an antidegradation analysis for the proposed outfall relocation for the City of Kendallville Wastewater Treatment Plant (WWTP). Effluent limitations for the proposed discharge will be determined as part of the antidegradation analysis. The WWTP currently treats sanitary-type and treated industrial wastewater, and has an average design flow of 2.68 MGD. The facility's NPDES Permit IN0020656 will expire on June 30, 2026.

The new outfall will discharge to Bixler Lake Ditch, located within the Lake Michigan drainage basin. The discharge will continue to be covered under the rules for the Great Lakes system. Information about the characteristics of the receiving stream and effluent limitations necessary to protect the designated stream uses is provided below.

Designated Stream Uses

Bixler Lake Ditch is designated for full body contact recreation and shall be capable of supporting a well-balanced, warm water aquatic community in accordance with 327 IAC 2-1.5-5.

Assessment Unit and 303(d) Listing

The receiving water, Bixler Lake Ditch, is located within the Lake Michigan drainage basin. The receiving water has a seven day, ten year low flow (Q7,10) of 0 cubic feet per second at the outfall location. Bixler Lake Ditch is located in watershed HUC-12 040500011504 and Assessment Unit INJ01F4_T1003. The Assessment Unit is not

currently included on the 2022 303(d) List of Impaired Waterbodies in Indiana. There is no Total Maximum Daily Load (TMDL) report available or in progress for the receiving stream or the surrounding watershed area.

Stream Design Flows

The Q7,10 of Bixler Lake Ditch has been determined to be 0 cfs at the proposed outfall location. The drainage area of Bixler Lake Ditch upstream of the proposed outfall is 6.6 mi^2. USGS gaging station 04100295 Rimmell Branch near Albion, IN has a drainage area of 10.7 mi^2, and has a Q7,10 of approximately 0.1 cfs. Therefore, the calculated Q7,10 at the proposed outfall location on Bixler Lake Ditch would be less than 0.1 cfs, or zero for the purposes of the Stream Characterization.

The drainage areas upstream of the proposed outfall was determined in part using the USGS website StreamStats. The information for the gaging station was obtained from the book Low-Flow Characteristics for Selected Streams in Indiana by Kathleen K. Fowler and John T. Wilson, published in 2015 by the USGS.

Water Quality Information

A retrieval from the IDEM Assessment Information Management System (AIMS) database for water quality information for Bixler Lake Ditch was not available. There is no active IDEM fixed water quality monitoring station in the watershed.

Nearby Dischargers

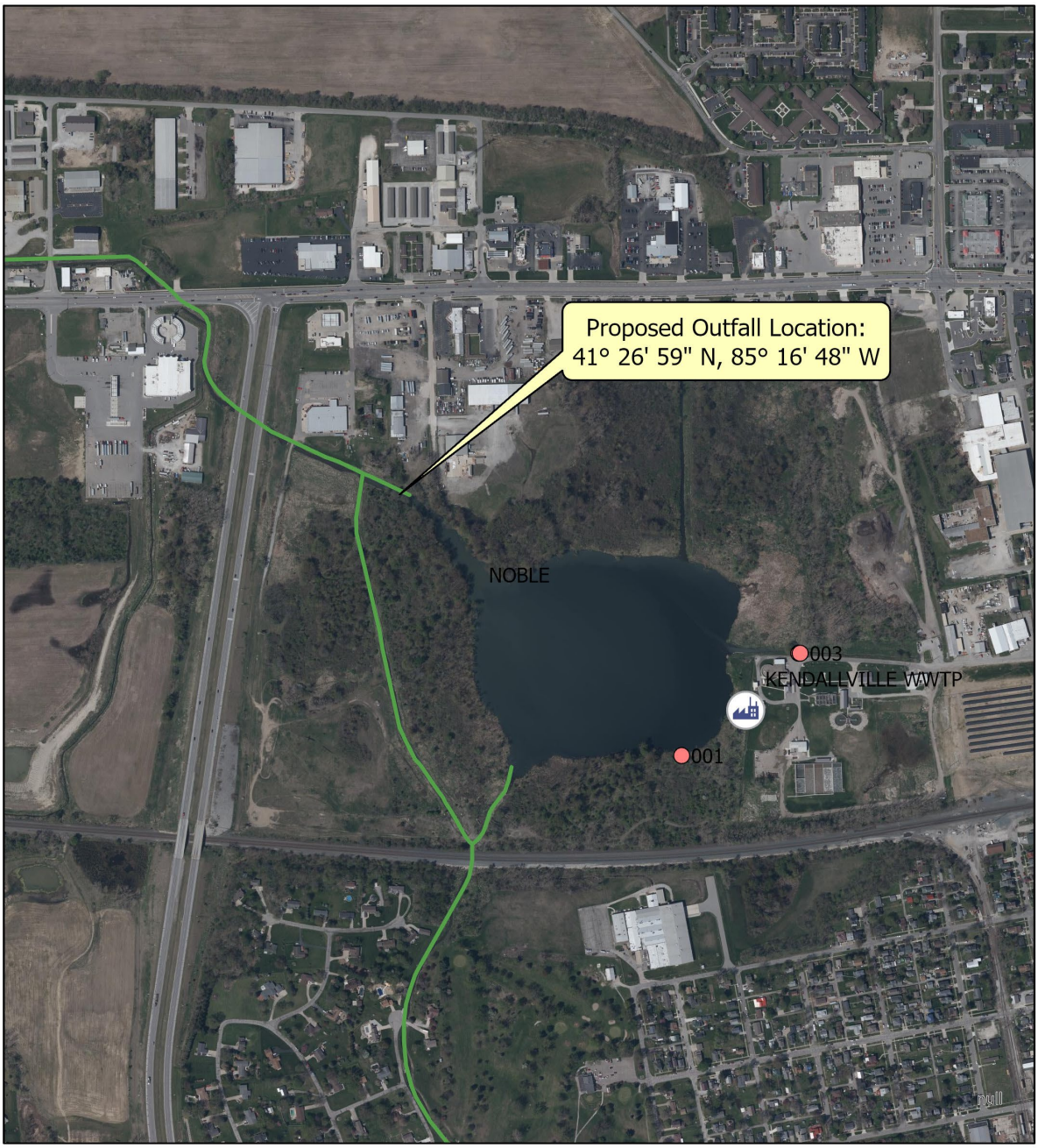
A search was made for nearby permitted point source dischargers, and none were found that would impact the development of water quality-based effluent limitations for this proposed discharge.

Protection of Designated Stream Uses

Based on the above stream characterization, antidegradation-based effluent limitations equivalent to a monthly average CBOD5 of 10 mg/l, monthly average summer/winter ammonia-N of 1.1/1.6 mg/l and daily average DO of 6.0 mg/l are adequate to protect aquatic life from a discharge containing these pollutants of concern. In addition, *E. coli* limitations established based on meeting criteria in the undiluted discharge are adequate to protect recreational uses.

Attachment

KENDALLVILLE PROPOSED OUTFALL LOCATION MAP



Map Created By: J Hanko

Date: January 2024

0 0.040.07 0.15 Miles

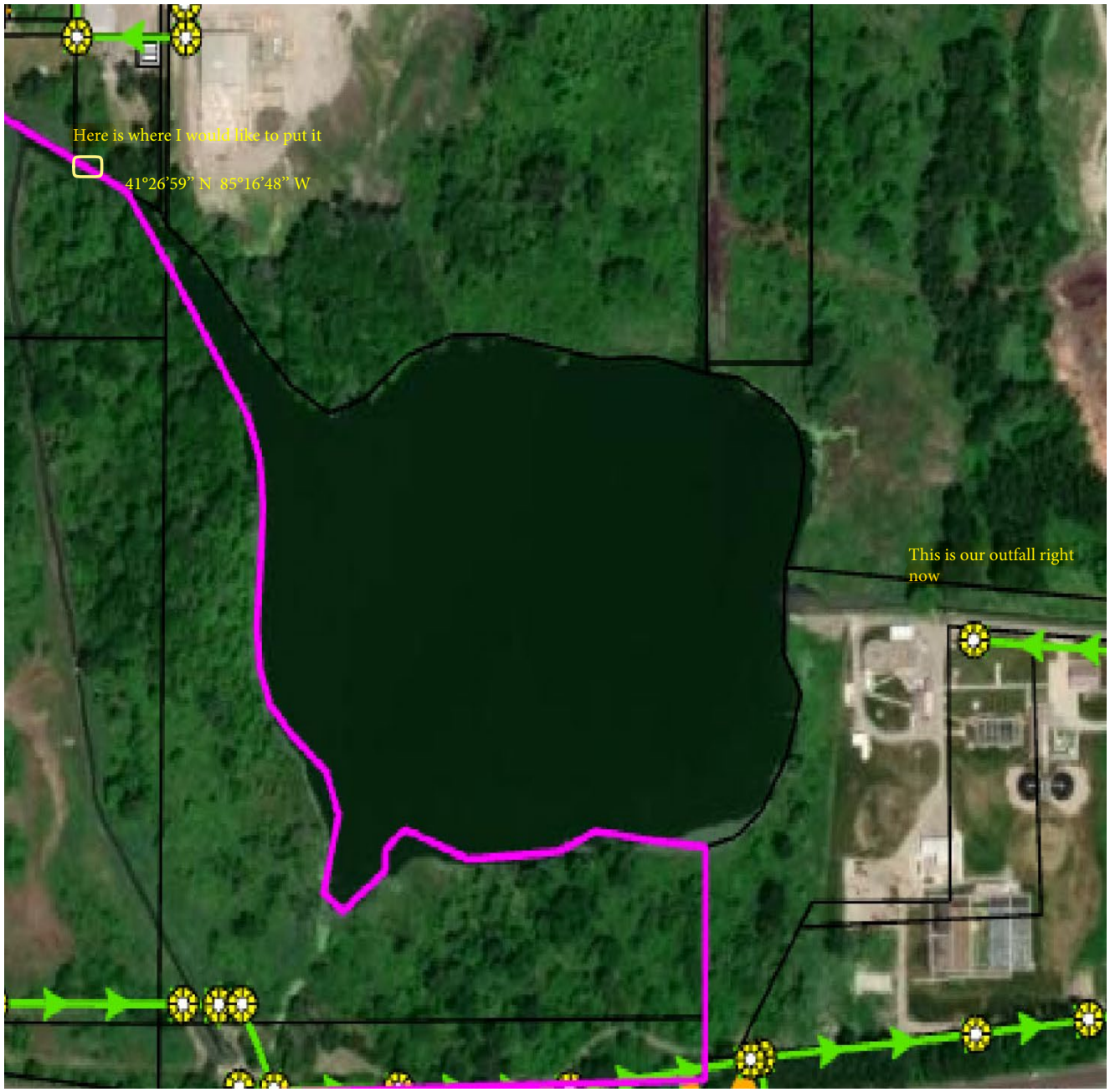
City of Kendallville

Wastewater Treatment Plant 501 W. Wayne Street, Kendallville, IN 46755

Phone (260) 347-1362 Fax (260) 347-7037 E-mail: phowell@kendallvillein.gov www.kendallvillein.gov

Jay Hanko,

I would like to ask if you could please look at our Permit No. IN0020656, on what changes if any would occur if we would move are outfall from Henderson Lake Outfall 003, 41°26’50” W 85°16’22” N to 41°26’59’’ N 85°16’48’’ W this is on the other side of Henderson Lake. I have included a map to show where this is.


Here is where I would like to put it
41°26'59" N 85°16'48" W
This is our outfall right now