



Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.

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Eric J. Holcomb
Governor

Brian Rockensuess
Commissioner

July 08, 2024

Via Email to: jrowe@townofnorthjudson.com

Mr. John Rowe, Town Council President
Town of North Judson
310 Cane Street
North Judson, Indiana 46366

Dear Mr. Rowe:

Re: Inspection Summary Letter
North Judson Municipal WWTP
NPDES Permit No. IN0020877
North Judson, Starke County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: July 03, 2024
Type of Inspection: Compliance Evaluation Inspection
Inspection Results: Potential problems were discovered or observed.

Effective immediately, IDEM is initiating a program strongly encouraging domestic wastewater utilities to perform cybersecurity vulnerability assessments, and to take actions to mitigate identified vulnerabilities and increase the cybersecurity resilience of Indiana's water sector. Utilities can choose any assessment tool appropriate for the water sector, but IDEM is highlighting the following websites for information and helpful vulnerability assessment tools made available from the U.S. EPA and the American Water Works Association: <https://www.epa.gov/waterresilience/epa-cybersecurity-water-sector> and <https://www.awwa.org/Resources-Tools/Resource-Topics/Risk-Resilience/Cybersecurity-Guidance>. IDEM will continue to share important updates on the cybersecurity of the water sector.

A copy of the NPDES Wastewater Facility Inspection Report is enclosed for your records. Please direct any response to this letter and any questions to Maggie Kroeger at 317-619-3639 or by email to mkroeger@idem.IN.gov.

Sincerely,

Kim Rohr, Chief
Wastewater Inspection Section
Office of Water Quality

Enclosure



NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NPDES Permit Number: IN0020877	Facility Type: Municipality	Facility Classification: Minor	TEMPO AI ID 59695				
Date(s) of Inspection:	July 03, 2024						
Type of Inspection:	Compliance Evaluation Inspection						
Name and Location of Facility Inspected: North Judson Municipal WWTP 900 N Elm Street North Judson IN 46366		Receiving Waters: Unnamed Ditch to Pine Creek	Permit Expiration Date: 8/31/2027 Design Flow: 0.47MGD				
County: Starke							
On Site Representative(s): First Name Last Name Title Email Phone Kimberly Kapp Assistant kkappnjutilities@yahoo.com 574-806-0411 Superintendent							
Was a verbal summary of findings presented to the on-site representative? Yes							
Certified Operator: Kimberly Kapp	Number: 21745	Class: II	Effective Date: 7-1-24 Expiration Date: 6-30-27 Email: kkappnjutilities@yahoo.com				
Cyber Security Contact: Name: Email:							
Responsible Official: Mr. John Rowe, Town Council President 310 Cane Street North Judson, Indiana 46366		Permittee: Town of North Judson Email: jrowe@townofnorthjudson.com Phone: Contacted? No					
Fax:							
INSPECTION FINDINGS							
<input type="radio"/> Conditions evaluated were found to be satisfactory at the time of the inspection. (5) <input type="radio"/> Violations were discovered but corrected during the inspection. (4) <input checked="" type="radio"/> Potential problems were discovered or observed. (3) <input type="radio"/> Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2) <input type="radio"/> Violations were discovered and may subject you to an appropriate enforcement response. (1)							
AREAS EVALUATED DURING INSPECTION (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)							
M	Receiving Waters	S	Facility/Site	M	Self-Monitoring	N	Enforcement
S	Effluent	M	Operation	S	Flow Measurement	S	Pretreatment
S	Permit	M	Maintenance	M	Laboratory	S	Effluent Limits Compliance
S	Collection System	S	Sludge Disposal	M	Records/Reports	N	Other:
DETAILED AREA EVALUATIONS							
Receiving Waters: M 1. The receiving stream was visibly free of excessive deposits of settled solids, floating debris, oil, scum, or billowy foam. Comments: The Receiving Waters was rated as marginal due to tan foam observed in the mixing zone of the receiving stream. Part I. A. 2 of the permit prohibits the discharge from any and all point sources specified within this permit from causing the receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, or scum: 1) that will settle to form putrescent or otherwise objectionable deposits; 2) that are in amounts sufficient to be unsightly or deleterious; 3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create nuisance.							
Effluent: S 1. Final effluent was free of excessive solids, floating debris, oil, scum, or billowy foam. Comments:							

The effluent was observed at the final flow meter and the outfall and was clear and free of color at the time of the inspection. It is noted, white foam was observed flowing over the weir from the post aeration tank.

Permit:

- S 1. Did the facility have a current copy of the permit available for reference?
- N 2. If the permit expires within 180 days, has a renewal application been submitted?
- S 3. Receiving waters and Facility Description in the permit reflect actual conditions at the facility.
- N 4. The permit has been properly transferred if there is a new owner.
- N 5. The NPDES Permit Schedule of Compliance monitoring and reporting milestones have been met.

Comments:

The facility was found to have a valid permit and the facility description, including units of treatment and receiving stream, is accurate.

Collection System:

- S 1. CSO's were found to be adequately monitored and maintained.
- S 2. There were no reported maintenance-related (clogged or blocked lines) overflow events in last 12 months.
- S 3. There were no reported hydraulic (I&I) overflow events in last 12 months.
- N 4. Facility has met SSO and dry weather CSO reporting requirements
- S 5. Any adverse impacts from SSO and CSO events have been properly mitigated.
- S 6. Lift stations were found to be adequately inspected, cleaned, and maintained, with adequate documentation of activities.
- S 7. Collection system maintenance activities appeared to be adequate.

Comments:

The collection system is comprised of 60% separate sanitary sewer and 40% combined sanitary sewer and storm sewer. The long term control plan (LTCP) is fully implemented at the facility. There were two reported CSO events from CSO Outfall 004 on 5/12/23 and 7/29/23. The CSO Case Manager is currently conducting a Level of Control Review and will advise if additional control action is needed. It was noted, comments on the CSO MRO should be included when discharges occur as all CSO discharges are prohibited.

There are eight lift stations in the collection system. All lift stations are inspected weekly on Thursdays. Lift station inspections document visual condition of wet well, any concerns, and pump hours. The lift stations that regularly have issues are inspected three days each week. Lift station wet wells and sewer lines are cleaned and maintained on an as-needed basis using the facilities Vac-truck. Third Street and James Street lift stations were evaluated during the inspection. Both lift stations appeared to be adequately maintained.

Facility/Site:

- S 1. The facility was found to have standby power or equivalent provision.
- S 2. An adequate alarm or notification system for power or equipment failure was available for the treatment facility and lift stations.
- S 3. Safe and adequate access was provided for inspection of all units and outfalls.
- S 4. Facilities and equipment did not appear beyond their useful life.
- 5. List any safety concerns:

Comments:

The facility grounds appeared to be well maintained. Adequate access was provided to all units of treatment, Outfall 001, and CSO Outfall 004. The facility has a standby generator that is tested every Tuesday for its readiness during power outages. A SCADA monitoring system is used to monitor all units of treatment at the treatment plant. The SCADA system contacts facility personnel when problems occur. All lift stations have visual alarms. There is no standby power for lift stations; however, most wet wells have ample capacity to sustain outages. If longer outages occur, the Vac-truck would be used to pump out the wet wells.

It is noted, the vegetation around Outfall 001 should be maintained for easier visual evaluation during future inspections.

Operation:

- M 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit were operated efficiently, including a report for an anticipated bypass report for steps of treatment taken out of service.
- S 2. An adequate, qualified operating staff was found to be provided to carry out the operation of the facility, including:
 - a. Certified Operator's on-site attendance and/or qualified operations personnel attendance was adequate.
 - b. Adequate documentation of operational activities, including system monitoring and cleaning.

c. Adequate funding to ensure proper operation.

M 3. Solids handling procedures include.

- a. Sufficient solids wasted from the treatment system, in a timely manner, to maintain process efficiency.
- b. Wasting of solids based on appropriate operational targets and valid process control testing.
- c. Adequate documentation of solids removal, handling, or control was available for review.

N 4. The facility was found to be operated efficiently during wet weather events.

Comments:

Operation was rated as marginal. The oxidation ditch appeared darker in color with a brown foam on the surface, the south secondary clarifier had scum and denitrified solids on the surface, and a light tan foam was observed in the post aeration tank. Facility personnel indicated the solids inventory was high at the time of the inspection and wasting was scheduled for that day. Wasting is determined by process control testing, sludge blanket depths, and overall facility condition.

Maintenance:

M 1. A maintenance record system has been established and includes maintenance/repair history and preventative maintenance plan.

M 2. Facility maintenance activities appeared to be adequate.

Comments:

Maintenance was rated as marginal due to needing improved documentation of preventative maintenance plan and vegetation noted in the CSO retention basin.

Maintenance records from 2024 were reviewed during the inspection. Cleaning and routine maintenance is documented on daily operation logs. Repairs and preventative maintenance is documented on an annual maintenance log.

Sludge Disposal:

S 1. Sludges, screenings, and slurries were found to be handled and disposed of properly.

Comments:

A records review during the inspection showed adequate handling and disposal of sludge. The facility wastes directly into geo-textile filter bags to dewater sludge before it is hauled off-site. The bags are hauled off-site 1-2 times each month by Republic Services and are taken to the County Line Landfill in Argos, IN. 17.31 tons of sludge were most recently hauled off-site on 5/10/24 by Republic Services

Self-Monitoring:

S 1. Samples were found to be taken at pre-designated locations and were found to be representative.

S 2. Flow-proportioned samples were found to be obtained where needed.

M 3. The facility was found to conduct sampling of all waste streams, including type and frequency, as required in the permit.

S 4. Sample collection procedures, including automatic sampling, were found to include:

- a. Samples refrigerated during compositing.
- b. Proper preservation techniques used.
- c. Containers and holding times conformed to 40 CFR 136.3.

M 5. Sample documentation was found to be adequate and included:

- a. Dates, times, and locations of sampling.
- b. Name of individual performing sampling.
- c. Instantaneous flow for flow-weighted aliquots.
- d. Chain of Custody records.

N 6. NPDES Permit Whole Effluent Toxicity (WET) testing requirements were found to be met.

Comments:

The Self-Monitoring Program generated a marginal rating. Dissolved Oxygen must be monitored five days each week using three grab samples taken within 24-hours. On holidays facility personnel only take one grab sample in 24-hours for DO. In addition, chlorine sample times are not consistently documented.

The facility is required to flow proportion composite samples. Due to the design of the facility, influent composite sampling would be difficult unless performed using an automatic composite sampler. The influent meter is after the EQ tank which contains variable frequency drives (VFDs) that control EQ pumps when the levels get to a certain height.

Flow Measurement:

S 1. Flow was found to be properly monitored as required by the permit.

S 2. Flow data and calibration records were available for review, and document that monitoring equipment

has been calibrated at the frequency required in the permit.

N 3. The stream flow gauging station is calibrated as often as necessary to provide accurate and reliable data, but at least once every 12 months.

N 4. A copy of the stream flow calibration curve or table is submitted to IDEM (OWQ Compliance Data Section) no later than October 1 of each year.

Comments:

The facility's flow measurement program, including all documentation, was found to be adequate and representative. The effluent, influent, RAS, WAS, and CSO Outfall 004 meters were calibrated on 5/29/24 by BL Anderson.

Laboratory:

The following laboratory records were reviewed:

D. O. Bench Sheets	Chlorine Bench Sheets	CBOD Bench Sheets
TSS Bench Sheets	Ammonia Bench Sheets	pH Bench Sheets
E. coli Bench Sheets	Lab Procedures	Calibration and Temperature

M 1. The laboratory practices and protocol reviewed were adequate, including:

- A written laboratory QA/QC manual was available.
- Samples were found to be properly stored.
- Approved analytical methods were found to be used.
- Calibration and maintenance of instruments was found to be adequate.
- QA/QC procedures were found to be adequate.
- Dates of analyses (and times where required) were recorded.
- Name of person performing analyses was recorded.

S 2. Review of lab records and/or on-site field testing equipment and protocols was found to be adequate.

Comments:

The Laboratory generated a marginal rating. The following issues were noted:

- For CBOD, samples must have an ideal depletion of at least 2 mg/L after five days and the DO on the fifth day must be at least 1 mg/L. Sample volumes and/or seed volumes must be changed so that at least one bottle for each sample meets these rules. Only bottles that meet these criteria should be considered for reporting. During disinfection season, the facility is setting up bottles with final, seeded final, and raw samples. During disinfection season, the average of the seeded final bottles that meet the study criteria must be reported on the MRO.
- For E. coli using the Colilert method, sample trays must be incubated for at least 24 hours, but no more than 28 hours.
- For Ammonia, the facility is using the Ion Selective Electrode method. Using this method, the results cannot be reported lower or higher than the Ammonia standards used to calibrate the probe. The facility is currently using 1, 10, and 100 mg/L standards to calibrate the probe.

Bench sheets from November 2023 and April 2024 were reviewed during the inspection.

For your information, IDEM offers a free laboratory assistance/training. If you are interested in receiving laboratory assistance, please contact Becky Ruark at 317- 691-1909 or at bruark@idem.in.gov.

Records/Reports:

The following records/reports were reviewed:

DMRs for the period of June 2023 to May 2024 were reviewed as part of the inspection.

S 1. All facility records for the period including the previous three years were available for review.

M 2. DMRs and MROs were found to be completed properly and accurately including:

- "No Ex" column was accurate.

- b. Signatory requirements were met.
- c. Reports were prepared by or under the direction of a certified operator.

N 3. Bypass and Noncompliance reporting were found to be adequate.

Comments:

The Records/Reports evaluation generated a marginal rating. The October 2023 MRO was not submitted to NetDMR. The facility must submit the MRO to NetDMR. The DO daily average minimum was reported incorrectly on the June 2023 and July 2023 DMR, but all other reports reviewed reported the accurate number. In addition, the facility has been using the wrong facility design flow on the MRO's which causes miscalculations to the percent capacity that is generated within the MRO form. The facility must correct this value in all future submittals.

Enforcement:

N 1. Agreed Order and/or Compliance Plan milestones have been met.

Comments:

There was no Agreed Order at the time of the inspection.

Pretreatment:

N 1. No evidence of interference from industrial or other sources of toxic substances was noted.

N 2. For both Delegated and Non-Delegated pretreatment programs:

- a. Industrial or commercial dischargers were found to be regulated as required.
- b. The permittee was found to enforce the Sewer Use Ordinance (SUO) and the Enforcement Response Plan (ERP).

S 3. If the non-delegated permittee accepts hauled waste:

- a. Does the POTW provide written permission to haulers?
- b. Does the POTW obtain samples from each hauled waste load and retain them for at least 48 hours?
- c. Does the POTW retain records of each load?

Comments:

Septic hauler permits and records documenting names, dates, origin, volume, and nature of waste, were available for review. The facility accepts hauled waste from three different septic haulers. Representative samples are taken from each load and kept for 48-hours, as required.

Effluent Limits Compliance:

Yes 1. Were DMRs reviewed as part of the inspection?

DMRs for the period of June 2023 to May 2024 were reviewed as part of the inspection.

No 2. Were violations noted during the review of DMRs?

Comments:

A records review indicated no effluent violations have been reported during the period reviewed.

IDEM REPRESENTATIVE

Inspector Name:

Maggie Kroeger

Email:

mkroeger@idem.IN.gov

Phone Number:

317-619-3639

Other staff participating in the inspection:

Name(s)

Porfirio Ascencio

Phone Number(s)

219-216-3235

IDEM MANAGER REVIEW

IDEM Manager:

Kim Rohr

Date:

7/8/2024

Inspection Photographs



Facility: North Judson Municipal WWTP	
Photographer: Maggie Kroeger	
Date: 7/3/2024	Time:
Others Present:	
Location/Description: Facing south, the photo shows the tan foam in the post aeration tank.	



Facility: North Judson Municipal WWTP	
Photographer: Maggie Kroeger	
Date:	Time:
Others Present:	
Location/Description: Facing west, the photo shows the mixing zone of the receiving stream. Minimal tan foam can be observed. Vegetation around the outfall and receiving stream made it difficult to evaluate.	



Facility: North Judson Municipal WWTP	
Photographer: Maggie Kroeger	
Date:	Time:
Others Present:	
Location/Description: Facing southwest, the photo shoes the vegetation in the CSO retention basin.	