



Indiana Department of Environmental Management

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Eric J. Holcomb
Governor

Bruno Pigott
Commissioner

January 10, 2020

Via Email to: heil@kconline.com
Mr. Rex Heil, President
Turkey Creek Regional Sewer District
4852 North County Road 1200 West
Cromwell, Indiana 46732

Dear Mr. Heil:

Re: Inspection Summary Letter
Turkey Creek Regional Sewer District
NPDES Permit No. IN0045802
Cromwell, Noble County

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

Date(s) of Inspection: January 09, 2020
Type of Inspection: Compliance Evaluation Inspection
Inspection Results: Conditions evaluated were found to be satisfactory at the time of the inspection.

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 Lynn Raisor at 317-691-0099 or by email to lraisor@idem.IN.gov.

Sincerely,

James E. Weingart, Director
Northern Regional Office

Enclosure



NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NPDES Permit Number: IN0045802	Facility Type: Municipality	Facility Classification: Minor	TEMPO AI ID 45343
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Date(s) of Inspection: January 09, 2020

Type of Inspection: Compliance Evaluation Inspection

Name and Location of Facility Inspected: Turkey Creek Regional Sewer District 4852 North County Road 1200 West Cromwell IN 46732	County: Noble	Receiving Waters: Cromwell Ditch	Permit Expiration Date: 5/31/2023
			Design Flow: .37MGD

On Site Representative(s):				
First Name	Last Name	Title	Email	Phone
Tim	Woodward	Superintendent	tim@tcrsd.com	574-529-0098

Was a verbal summary of findings presented to the on-site representative? **Yes**

Certified Operator: Tim Woodward	Number: 19287	Class: III	Effective Date: 7-1-18	Expiration Date: 6-30-21	Email: tim@tcrsd.com
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Cyber Security Contact:
Name: Tim Woodward Email: tim@tcrsd.com

Responsible Official: Mr. Rex Heil, President	Permittee: Turkey Creek Regional Sewer District
	Email: heil@kconline.com
4852 North County Road 1200 West Cromwell, Indiana 46732	Phone: _____ Contacted? No
	Fax: _____

INSPECTION FINDINGS

- Conditions evaluated were found to be satisfactory at the time of the inspection. (5)
- Violations were discovered but corrected during the inspection. (4)
- Potential problems were discovered or observed. (3)
- Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)
- 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)

S	Receiving Waters	S	Facility/Site	S	Self-Monitoring	N	Compliance Schedules
S	Effluent	S	Operation	S	Flow Measurement	N	Pretreatment
S	Permit	S	Maintenance	S	Laboratory	M	Effluent Limits Compliance
M	Collection System	S	Sludge	S	Records/Reports	N	Other:

DETAILED AREA EVALUATIONS

Receiving Waters:

S 1. The receiving stream was visibly free of excessive deposits of settled solids, floating debris, oil, scum, or billowy foam.

Comments:

The receiving stream was evaluated at the outfall and was free of notable foam, algae or solids.

Effluent:

S 1. Final effluent was free of excessive solids, floating debris, oil, scum, or billowy foam.

Comments:

The effluent was clear and free of color at the time of the inspection.

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.

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:

N 1. CSO's were found to be adequately monitored and maintained.

S 2. There were no maintenance-related (clogged or blocked lines) overflow events in last 12 months.

M 3. There were one 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 contains 28 lift stations, all with telemetry. Four of the lift stations are on the new cellular based Win911 system. All others remain on the SCDATA system. As items on the SCDATA system are repaired/replaced, the Win911 system will be installed. 18 lift stations have dedicated generators, and all lift stations are checked on a weekly basis. In addition to the lift stations, the collection system contains 270 low pressure pump pits and 1000 in-line residential retention tanks. The retention tanks act as a semi-septic tank and settles out some solids. Each tank is inspected and cleaned on a rotating basis, but at least every ten years. The 270 pump pits all have both lights and audible alarms. The District has dedicated collection system staff to clean, inspect, and maintain the system.

The facility reported one collection system overflow in the last year, resulting in a marginal rating. This occurred during the July Fourth holiday and after a five inch rain event. The newest lift station in the system had all three VFD pumps running and overwhelmed the sewer line, in lieu of utilizing the lift station wet well for storage. Since that time, the lift station control panel has been re-set to allow for no more than three pumps at a time to operate. The pumps are VFD in operation and each pump can handle expected wet weather flows.

In June 2019, all sanitary flows that were previously sent to the Syracuse WWTP for treatment were re-directed back to the Turkey Creek RSD WWTP for treatment. Additionally, since this area is known to contain some inflow and infiltration, 'hard hat' caps were installed in many manholes. The District continually works to reduce inflow and infiltration.

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 consists of an influent equalization, grit removal, dual oxidation ditches, secondary clarification, UV disinfection (seasonal) and cascade post aeration. All units of treatment were in service at the time of the inspection. The influent equalization pumps and RAS pumps are variable speed and connected to the influent flow meter. Each of the secondary clarifiers have an individual return pit structure/pump and can operate completely independently of each other.

The facility recently completed a plant upgrade that now provides a peak treatment capacity of 1.8 mgd. This capacity upgrade included a sixth VFD influent pump, fourth secondary clarifier, new grit removal system, and new influent mechanical fine screen.

The District is currently exploring options to possibly complete another collection system expansion. Currently, the engineering costs of different types of collection systems is being evaluated.

Operation:

S 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.

S 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.

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

Comments:

All units of treatment appeared to be operating efficiently. Very good color and mixing was noted in the oxidation ditches. The secondary clarifiers were settling well and had no floating ash or debris. Sludge is wasted on a daily basis utilizing a calculation of a target MLSS value and analytical data. All wasting data is readily available for review.

In preparation for large rainfall expected overnight, plant operators were bringing on line two additional secondary clarifiers. IDEM commends this proactive approach.

Maintenance:

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

S 2. Facility maintenance activities appeared to be adequate.

Comments:

All maintenance activities appear adequate. The District implements an EPA Asset Management/Maintenance program called CUPSS. This program generates daily, weekly, monthly, and annual maintenance or operational activities.

Sludge:

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

Comments:

A records review during the inspection showed adequate wasting, handling, and disposal of sludge. Sludge wasting is well documented on both daily calculation sheets and the MRO. Dried sludge is land applied under Land Application Permit INLA00356. During cold weather months, sludge is wet hauled for disposal.

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.

S 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.

S 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:

All sampling practices, including raw and intermediate unit process testing, are conducted accurately and at the frequency required by the permit. The effluent sample is collected by an automatic sampler. Currently, influent sampling is only a single grab sample. IDEM recommends composite sampling for a more accurate picture of the influent wastestream.

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.

Comments:

The facility's flow measurement program, including all documentation, was found to be adequate and

representative. The effluent flow meter was last calibrated on August 29, 2019.

Laboratory:

The following laboratory records were reviewed:

Sample Log	pH Bench Sheets	D. O. Bench Sheets
CBOD Bench Sheets	TSS Bench Sheets	Ammonia Bench Sheets

- S 1. The laboratory practices and protocol reviewed were adequate, including:
- a. A written laboratory QA/QC manual was available.
 - b. Samples were found to be properly stored.
 - c. Approved analytical methods were found to be used.
 - d. Calibration and maintenance of instruments was found to be adequate.
 - e. QA/QC procedures were found to be adequate.
 - f. Dates of analyses (and times where required) were recorded.
 - g. 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 bench sheets reviewed during the inspection appeared to be accurate and complete. The facility conducts extensive Quality Control testing that includes duplicates, blanks, percent recovery, and known standards.

Records/Reports:

The following records/reports were reviewed:

DMRs for the period of December 2018 to November 2019 were reviewed as part of the inspection.

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

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

- a. "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 requested records were available and appeared to be complete and accurate.

Compliance Schedules:

- N 1. The NPDES Permit Schedule of Compliance monitoring and reporting milestones have been met.

- N 2. Agreed Order compliance milestones have been met.

Comments:

There is no Schedule of Compliance in the current permit, or an Agreed Order.

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 (SOU) and the Enforcement Response Plan (ERP).

- N 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:

The facility has no industrial contributors.

Effluent Limits Compliance:

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

DMRs for the period of December 2018 to November 2019 were reviewed as part of the inspection.

- Yes 2. Were violations noted during the review of DMRs?

Comments:

The facility reported one Ammonia violation in July 2019 and three Ammonia violations in February 2019. The February violations all occurred in two days, and during extreme cold weather conditions.

IDEM REPRESENTATIVE

Inspector Name:
Lynn Raisor

Email:
lraisor@idem.IN.gov

Phone Number:
317-691-0099

IDEM MANAGER REVIEW

IDEM Manager:

James E. Weingart

Date:

1/9/2020