Indiana Department of Environmental Management

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Eric J. Holcomb Governor Bruno Pigott Commissioner

February 11, 2020

<u>Via Email to:</u> mamiller@uiwater.com Mr. Mike Miller, Regional Manager Community Utilities of Indiana, Inc. 10966 Four Seasons Place, Suite 100G Crown Point, Indiana 46307

Dear Mr. Miller:

INDIANA UTILITY REGULATORY COMMISSION

FILED

April 30, 2020

Re: Inspection Summary/ Noncompliance Letter

Community Utilities WWTP NPDES Permit No. IN0037176 Crown Point, Lake County

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

Date(s) of Inspection:	February 03, 2020
Type of Inspection:	Compliance Evaluation Inspection
Inspection Results:	Violations were observed.

The following concerns were noted:

1. The Collection System evaluation generated an unsatisfactory rating. The Collection System area was rated as unsatisfactory due to the facility experiencing excessive inflow and infiltration (I/I) in the collection system which continues to hydraulically overload the wastewater treatment plant. This is a violation of Part II. B. 1 of the permit which requires all facilities to be maintained in good working order at all times and operated as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. This includes the facility's collection system. Evidence of the I/I includes the need to use trash pumps during wet weather events, as referenced under Operations.

Additionally, two SSOs, associated with inflow/infiltration issues, were reported within the past 12 months. The facility is under an Early Warning Sewer Ban due to inflow/infiltration issues. Six of the last 12 months were reported at 100% capacity or higher. Both of the effluent exceedances over the past 12 months, as seen under the Effluent Limits Compliance evaluation, were reported as due to rainfall and subsequent flow through the facility.



The additional work to utilize trash pumps to pump the north and south aeration tanks to the package plant aeration tank to stabilize the hydraulics of the wastewater plant should not be a standard operating procedure. While this is preferable to discharging pollutants to the receiving stream or having basement backups, a long term solution will need to be determined and applied rather than reacting to wet weather situations.

- 2. Operation was rated as marginal. While the facility appeared to be operating efficiently at the time of the inspection, extraordinary operations are needed to prevent solids from washing out of the facility during high wet weather conditions due to inflow/infiltration, including the use of pumps to redirect wastewater from the north and south aeration tanks to the package plant aeration tank to prevent the flooding of aeration tanks. The facility has had two upgrades that included the addition of aeration tanks, which may be contributing to the problems with the hydraulics of the facility, especially during wet weather.
- 3. The Laboratory evaluation generated a marginal rating. Microbac conducts analysis on most parameters, but on-site testing is conducted for D.O., TRC, TSS, and pH. It appears on-site personnel are calibrating with a three-point method for pH, but the calibration records could not be produced at the time of the inspection. The appropriate pH standards were open and dated and the operator displayed knowledge of the calibration process. In an email from Mr. Grosvenor, dated February 4, 2020, Excel versions of the lab spreadsheet were made available indicating daily calibrations of the pH meter. The email also indicated changes will be made to ensure the paper records reflect future calibrations for pH.
- 4. The Effluent Limits Compliance area was rated unsatisfactory due to self-reported violations of the limits detailed in Part I. A. of the NPDES Permit. Review of DMRs revealed one TSS maximum weekly loading exceedance in May 2019 and one CBOD maximum weekly concentration exceedance in October 2019. Both exceedances were attributed to high flows after a wet weather event.

Part II. A. 1. of your permit requires you to comply with its terms and conditions. Any noncompliance with the terms of your permit may subject you to an enforcement action which can include the imposition of penalties. You are required to immediately take all necessary measures to comply with the terms and conditions of your NPDES Permit, specifically those violations identified above.

Within 30 days of receipt of this letter, a written detailed response documenting correction of the concerns listed above and/or a plan for assuring future compliance must be submitted to this office. Failure to respond adequately to this letter may result in formal enforcement action. Please direct your response to this letter to the attention of Bridget S. Murphy, at our letterhead address or via email to

wwViolationResponse@idem.IN.gov. Any questions should be directed to Nicholas Ream at 219-730-1691 or by email to nream@idem.IN.gov. Thank you for your attention to this

Community Utilities of Indiana Inc. Cause No. 44724 IDEM letters - February 2020 Q1 2020 Page 3 of 13

matter.

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Rick Massoels, Deputy Director Northwest Regional Office Enclosure



NPDES Wastewater Facility Inspection Report INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

	S Permit Number:	Facility Type:				Facility Classification			:	TEMPO AI ID	
	IN0037176	Mixed Ownership				Major		111		17381	
Date		ruary 03, 20					,				
		pliance Eva		nspection							
	and Location of Facility Inspec	cted:	luation	rispection		Receiving Wa	aters:			Perm	it Expiration Date:
	munity Utilities WWTP										6/1/2023
	East 123rd Avenue		C	county:		East Branch of Stoney Run Creek			Desi	gn Flow:	
	Crown Point IN 46307 Lake 1.1MGD					-					
On Sit First N Lore	lame Last Name n Grosvenor										
	Was a verbal summ			esented to	the	e on-site r	epreser	ntative?	Yes		
Certifie	-	Number:	Class:	Effective Date:	Ex	-					
	Loren Grosvenor	20434	III	7-1-19		6-30-22	Iggrosve	enor@ui	water.cor	n	
Cybe	er Security Contact:										
Name				Email:							
	^{nsible Official:} Iike Miller, Regional Man	agor				Permittee:	Commur	hity Utilit	es of Ind	iana,	Inc.
	6 Four Seasons Place,					Email:	mamiller	@uiwate	er.com		
1090		Suite 100G				Phone:					Contacted?
Crow	n Point, Indiana 46307					Fax:					No
0101				NSPECTION	I FI	NDINGS					
	\bigcirc Conditions evaluated v	vere found to					pection. (5)			
	\bigcirc Violations were discove	ered but corr	ected du	ring the inspe	ctio	n. (4)					
	O Potential problems wer	re discovered	l or obse	rved. (3)							
	• Violations were discove			. ,	/011	and/or a fol	low-un in	spection I	ov IDFM (2)	
	O Violations were discove									2)	
				ALUATED I					1)		
				= Marginal, U =							
S	Receiving Waters	S	Facility		S	Self-Monit		S	Complia	ince S	Schedules
S	Effluent	M	Operat		S	Flow Mea	-		Pretreatment		
			<u> </u>								
S	Permit	S	Mainte		M	Laborator	•	M	Effluent Limits Complianc		s Compliance
U	Collection System	S	Sludge		S	Records/F	•	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 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 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?											
<u>S</u> 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.
- <u>S</u> 2. There were zero maintenance-related (clogged or blocked lines) overflow events in last 12 months.
- M_3. There were two hydraulic (I&I) overflow events in last 12 months.
- S 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.
- <u>S</u> 6. Lift stations were found to be adequately inspected, cleaned, and maintained, with adequate documentation of activities.
- U 7. Collection system maintenance activities appeared to be adequate.

Comments:

The Collection System evaluation generated an **unsatisfactory** rating. The Collection System area was rated as unsatisfactory due to the facility experiencing excessive inflow and infiltration (I/I) in the collection system which continues to hydraulically overload the wastewater treatment plant. This is a violation of Part II. B. 1 of the permit which requires all facilities to be maintained in good working order at all times and operated as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. This includes the facility's collection system. Evidence of the I/I includes the need to use trash pumps during wet weather events, as referenced under Operations.

The additional work to utilize trash pumps to pump the north and south aeration tanks to the package plant aeration tank to stabilize the hydraulics of the wastewater plant should not be a standard operating procedure. While this is preferable to discharging pollutants to the receiving stream or having basement backups, a long term solution will need to be determined and applied rather than reacting to wet weather situations.

Additionally, two SSOs, associated with inflow/infiltration issues, were reported within the past 12 months. The facility is under an Early Warning Sewer Ban due to inflow/infiltration issues. Six of the last 12 months were reported at 100% capacity or higher. Both of the effluent exceedances over the past 12 months, as seen under the Effluent Limits Compliance evaluation, were reported as due to rainfall and subsequent flow through the facility.

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:

It was noted that the facility has a standby generator that is tested on a regular basis. The facility grounds appeared to be well maintained.

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

Comments:

Operation was rated as marginal. While the facility appeared to be operating efficiently at the time of the

inspection, extraordinary operations are needed to prevent solids from washing out of the facility during high wet weather conditions due to inflow/infiltration, including the use of pumps to redirect wastewater from the north and south aeration tanks to the package plant aeration tank to prevent the flooding of aeration tanks. The facility has had two upgrades that included the addition of aeration tanks, which may be contributing to the problems with the hydraulics of the facility, especially during wet weather. 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: Facility maintenance activities appeared to be adequate. This evaluation is only for the sewage treatment facility itself and not for the collection system, which appears to have inflow/infiltration problems. Sludge: S 1. Sludges, screenings, and slurries were found to be handled and disposed of properly. Comments: A records review during the inspection, specifically for January 2020, showed adequate wasting, handling, and disposal of sludge. Sludge is disposed by either land application under permit number INLA 101, or via Wheeling Bros., who has a separate land application permit, if the soil conditions are not right for land application. 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: The Self Monitoring Program was rated as satisfactory. All sampling practices, including raw and intermediate unit process testing, are conducted accurately and at the frequency required by the permit. The most recent scale calibration was conducted by Midwest on September 6, 2019. 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 effluent flow meter was last calibrated by Phoenix Innovations on May 28, 2019. Laboratory: The following laboratory records were reviewed: D. O. Bench Sheets Sample Log Chain-of-Custody Contract Lab Reports pH Bench Sheets **TSS Bench Sheets** <u>N</u>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.

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

Contract Lab Information					
Microbac	Merrillville, Indiana				
Comments: The Laboratory evaluation generated a marginal rating. Microbac conducts analysis on most parameters, but on- site testing is conducted for D.O., TRC, TSS, and pH. It appears on-site personnel are calibrating with a three- point method for pH, but the calibration records could not be produced at the time of the inspection. The appropriate pH standards were open and dated and the operator displayed knowledge of the calibration process. In an email from Mr. Grosvenor, dated February 4, 2020, Excel versions of the lab spreadsheet were made available indicating daily calibrations of the pH meter. The email also indicated changes will be made to ensure the paper records reflect future calibrations for pH.					
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. S 3. Bypass and Noncompliance reporting were found to be adequate.					
Comments: The requested records were available and appeared to b	e complete and accurate.				
S 1. The NPDES Permit Schedule of Compliance monitoring and reporting milestones have been met. N 2. Agreed Order compliance milestones have been met. Comments: The facility is on schedule with all requirements of the Schedule of Compliance for phosphorus in the permit.					
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 permitee 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 sources.					
Effluent Limits Compliance: Yes 1. Were DMRs reviewed as part of the inspection?					
DMRs for the period of January 2019 to December 2019 were reviewed as part of the inspection. Yes 2. Were violations noted during the review of DMRs? Comments: The Effluent Limits Compliance area was rated marginal due to self-reported violations of the limits detailed in Part I. A. of the NPDES Permit. Review of DMRs revealed one TSS maximum weekly loading exceedance in May 2019 and one CBOD maximum weekly concentration exceedance in October 2019. Both exceedances were attributed to high flows after a wet weather event. IDEM REPRESENTATIVE					

Inspector Name:	Email:	Phone Number:		
Nicholas Ream	nream@idem.IN.gov	219-730-1691		
Other staff participating in the inspection:				
Name(s)	Phone Number(s)			

1			Page o 01 15			
Bob Strimbu	219-464-0233					
IDEM MANAGER REVIEW						
IDEM Manager:		Date:				

Rick Massoels

Date:

2/10/2020

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Eric J. Holcomb Governor

Bruno Pigott Commissioner

February 14, 2020

<u>Via Email To:</u> mamiller@uiwater.com Mr. Mike Miller, Regional Manager Community Utilities of Indiana, Inc. 10966 Four Seasons Place, Suite 100G Crown Point, IN 46307

Dear Mr. Miller:

Re: Status Reminder Sewer Ban Early Warning Community Utilities WWTP NPDES IN0037176 Crown Point, Lake County

This letter serves as a reminder that pursuant to administrative rule 327 Indiana Administrative Code (IAC) 4-1-3, a Sewer Ban Early Warning notice was given to the Community Utilities WWTP on July 17, 2018. Rule 327 IAC 4-1-3 states that when a wastewater treatment plant has reached or is approaching 90% of its hydraulic or organic design capacity, the Commissioner (or the Commissioner's delegate) shall notify it that the imposition of a Sewer Connection Ban may be necessary.

The Office of Water Quality has evaluated the Community Utilities WWTP discharge records for the past year and finds that the chronic hydraulic overload condition that existed when the Sewer Ban Early Warning was issued still exists. This determination is based on a review of the reported effluent flow for the annual period of 2019 which shows that the annual average rate of discharge for this year was 91% respectively, based on the design flow of 1.1 mgd.

Additionally, a review of Bypass/Overflow records revealed two overflow event(s) attributed to I/I were reported during the period of 2019, which represents wastewater flows that are not included in the above totals.

We view the early warning notification process as a service to local government officials. The early warning notification is intended to alert the owners and operators of wastewater treatment systems to potential problems, and initiate a process for evaluation of existing conditions, plan for future solutions, and arranging for funding in case capital improvements are required.

One impact of the early warning notification is that if additional connections to the wastewater collection and treatment system are requested that would require a



construction permit, they will be subject to close scrutiny by this department. The approval of any future connections would have to be evaluated for the possibility of significant additional load to the wastewater treatment plant or contribution to bypassing or the discharge of insufficiently treated sewage.

Furthermore, the rule which governs the overload condition of wastewater treatment facilities also contains a provision for the imposition of a ban on future wastewater connections. A sewer connection ban may be imposed if the excessive hydraulic and/or organic loading to the wastewater treatment plant continues, or the addition of wastewater from new sources is likely to result in the bypassing or the discharge of insufficiently treated sewage. Although a sewer connection ban is not being issued at this time, your flow records indicate that your community could qualify for such at this time. An excerpt from 327 IAC 4 is included for your reference.

Within 30 days of receipt of this letter, we are requesting that a written detailed response describing a plan for resolving this hydraulic loading issue be submitted to this office. Failure to respond with an adequate plan may result in the escalation to a Sewer Connection Ban pursuant to 327 IAC 4-1-4. Please direct your written response to Kim Rohr at:

Indiana Department of Environmental Management Office of Water Quality 100 N. Senate Avenue, IGCN 1255 Indianapolis, IN 46204-2251.

If you have any questions, please do not hesitate to contact Kim Rohr 317-719-1666 or KRohr@idem.IN.gov.

Sincerely,

Bridget SM prephy

Bridget S. Murphy, Chief Wastewater Inspections Section Compliance Branch Office of Water Quality

Attachment

The following is an excerpt from 327 IAC 4, which applies to this correspondence:

327 IAC 4-1-1 Purpose

This article is promulgated in order to prevent the excessive hydraulic or organic, or both, overloading of POTWs or semipublic facilities resulting in the subsequent discharge or bypassing of insufficiently treated wastewater due to:

- (1) new sewer connections to; or
- (2) poor operation and maintenance of;

the facilities.

327 IAC 4-1-3 Early warning system

Whenever, in the determination of the commissioner, a semipublic facility or POTW has reached or is approaching ninety percent (90%) of its hydraulic or organic design capacity, the commissioner shall notify the semipublic facility or POTW that it may be necessary, because of such condition, to impose a sewer connection ban if action is not taken by the semipublic facility or POTW to accommodate additional flow or loading. The notification shall be:

- (1) by certified mail, return receipt requested; and
- (2) directed to the:
 - (A) principal executive officer;
 - (B) ranking elected official; or
 - (C) authorized agent;
 - of the semipublic facility or POTW.

Failure of the commissioner to provide the notification to the semipublic facility or POTW shall not preclude the imposition of a sewer connection ban as authorized by this article.

327 IAC 4-1-4 Imposition of sewer connection bans

(a) The commissioner may impose a ban on further sewer connections to the semipublic facility or POTW whenever, in the determination of the commissioner:

- hydraulic or organic overloading of a semipublic facility or POTW exists or is impending and the introduction into the semipublic facility or POTW of additional wastewater from new or existing sources is likely to result in the discharge or bypassing of insufficiently treated wastewater; or
- (2) poor operation and maintenance practices have, or are likely to, result in the discharge or bypassing of insufficiently treated wastewater.

(b) The sewer connection ban shall prohibit the connection or introduction of additional wastewater into the semipublic facility or POTW, except as otherwise provided under this article.

327 IAC 4-1-5 Notification of imposition of sewer connection ban

(a) Whenever the commissioner has determined to impose a ban on further sewer connections to a POTW, the commissioner shall notify the principal executive officer, the ranking elected official, or the authorized agent or representative of the POTW of such determination by certified mail, return receipt requested.

(b) Whenever the commissioner has determined to impose a ban on further sewer connections to a semipublic facility, the commissioner shall notify the owner, chief executive officer, or authorized agent or representative of the semipublic facility of such determination by certified mail, return receipt requested.

327 IAC 4-1-6 Grounds and procedures for obtaining waivers of sewer connection bans

(a) Requests for connections from new or existing sources to a semipublic facility or POTW where a sewer connection ban is in effect may be approved if it is determined by the commissioner that any of the following conditions exist:

- (1) The:
 - (A) connection will eliminate an existing health hazard; and

(B) resulting public health benefit is considered to outweigh the adverse impact of any reduction in the effluent quality from the semipublic facility or POTW.

- (2) A semipublic facility or POTW expansion project:
 - (A) is under construction; and
 - (B) will be completed in such time as to accommodate the new connections.
- (3) An equivalent amount of infiltration or wastewater is removed from the system, thus assuring that the additional wastewater will receive treatment.
- (4) The commissioner is assured that additional water pollution treatment/control facilities, such as chemical feed equipment, will be provided such that the effluent from the semipublic facility or POTW will not deteriorate beyond its present quality.
- (5) Other assurances are provided that the additional wastewater to be discharged into the semipublic facility or POTW shall receive adequate treatment.

(b) Requests by POTWs for the waiver of a sewer connection ban for new or existing sources should be submitted by the principal executive officer or ranking elected official of the POTW to the commissioner. Requests by semipublic facilities for the waiver of a sewer connection ban for new or existing sources should be submitted by the owner, chief executive officer, or authorized agent or representative of the semipublic facility to the commissioner. The request for waiver of a sewer ban should contain, at a minimum, the projected:

- (1) flow and pollutant loadings from the proposed connection or connections; and
- (2) impact upon the semipublic facility or POTW.

327 IAC 4-1-7 Grounds for termination of sewer connection ban

A sewer connection ban may be terminated by the commissioner when either of the following exist:

- (1) A demonstrated wastewater treatment facility improvement to meet applicable NPDES permit limitations has been completed.
- (2) It is demonstrated to the satisfaction of the commissioner that an existing hydraulic/organic overloaded condition has been or will be discontinued for a continuous period of twelve (12) months from the date additional connections will be made.

327 IAC 4-1-8 Exclusions from sewer connection bans

The following shall be excluded from the requirements of sewer connection bans:

- (1) Single-family dwellings erected on vacant lots served by an existing sanitary sewer.
- (2) Projects that possess a valid construction permit issued under 327 IAC 3-2 prior to the imposition of a sewer connection ban.

bcc: Don Worley, OWQ Facilities Construction Nick Ream, Inspector Kim Rohr, Sewer Ban VFC