

INSPECTION REPORT

Inspection Entry Date/Time	09/06/2023 12:22 PM (CT)	Announced: Yes	
Inspection Exit Date/Time	09/06/2023 03:45 PM (CT)	Access: Granted	
Weather	Cloudy/rain		
Media	Water		
Statute(s)/Program(s)	Clean Water Act, NPDES, WWTP		
Type of Inspection	Compliance Evaluation Inspection (CEI)		
Permittee Name	Forest County Potawatomi Community		
Facility Names	1) Crandon Recirculating Sand Filter/Stone Lake WWTP; and 2) Carter Wastewater Treatment Facility		
Facility Physical Address	1) Hwy 8 East; 2) Hwy 32 S		
City, State, Zip Code	1) Crandon, WI; 2) Carter, WI		
County	Forest County		
Facility GPS Coordinates	1) 45.56948, -88.85437499; 2) 45.40145833, -88.62622499		
Mailing Address (If different)	Forest County Potawatomi Community P.O. Box 340 5416 Everybody's Road		
City, State, Zip Code	Crandon, WI 54520		
FRS ID	1) 110010884221; 2) 110070628400		
Permit Number(s) (If Applicable)	1) WI0058424; 2) WI0058432		
SIC and/or NAICS	4952		
Regulatory Representatives Participating in Inspection:			
Title	Name	Organization	
Inspector	Ray Cullen	EPA REGION 5	
Lead Inspector:			
Dean Maraldo	<i>[Signature]</i> DINO MARALDO Digitally signed by DINO MARALDO Date: 2023.09.22 09:01:50 -05'00'		
	EPA REGION 5	maraldo.dean@epa.gov	(312) 353-2098
Supervisor Review:			
Ryan Bahr	<i>[Signature]</i> RYAN BAHR Digitally signed by RYAN BAHR Date: 2023.09.27 18:11:30 -05'00'		
	EPA REGION 5	bahr.ryan@epa.gov	

SECTION I – INTRODUCTION**Site Entry and Inspection Objectives**

I, EPA Region 5 Lead Inspector, Dean Maraldo, arrived at the Forest County Potawatomi Community (“FCPC”) Utilities office near the Crandon Recirculating Sand Filter/Stone Lake Wastewater Treatment Plant (“Stone Lake WWTP”), located at Hwy 8 East, Crandon, WI 54520, at 12:22 PM (CT) on 09/06/2023 for an announced inspection. I, along with EPA Region 5 inspector Ray Cullen, presented our inspector credentials to Nate Guldán and informed them that this was a EPA Region 5 inspection to determine compliance as authorized by Clean Water Act (CWA) Section 308 and implementing regulations. This report is based on information supplied by representatives of the Forest County Potawatomi Community, owners and operators of the Stone Lake WWTP and Carter Wastewater Treatment Facility (“Carter WWTF”), direct observations made by EPA Region 5 inspectors, records and reports maintained by the permittee and other information including: photographs taken by EPA Region 5 inspectors, physical evidence collected by the EPA Region 5 inspectors, verbal or written statements made by information supplied by Stone Lake WWTP and Carter WWTF representatives during or subsequent to the on-site inspections, and materials, processes, data, photographs, or documents shown, demonstrated, or submitted to the EPA Region 5 inspectors by Stone Lake WWTP and Carter WWTF representatives during or subsequent to the on-site inspections. In addition, information gathered prior to or subsequent to the inspections from a review of EPA and/or public records may be included in this report.

Attendees

Organization	Attendee Name	Title	Present in Opening Conf.	Present in Closing Conf.
EPA Region 5	Dean Maraldo	Lead Inspector	Yes	Yes
EPA Region 5	Ray Cullen	Inspector	Yes	Yes
FCPC	Nate Guldán	Public Works Division Administrator	Yes	Yes
FCPC	Aaron Loomis	Attorney	Yes	Yes
FCPC	Bruce Johnson	Utility Manager	Yes	Yes
Indian Health Service	Shane Hoffman	Wisconsin Tribal Utility Consultant	Yes	Yes
FCPC	Jennifer Spencer	Water and Sewer Manager	Yes	Yes

Facility/Site Description

I began by reviewing the facility description provided in the current permits (excerpts below) for Stone Lake WWTP and Carter WWTF, and the Facility representatives confirmed the information as described below. Changes to the permit descriptions were made by Bruce Johnson (Utility Manager) and indicated in bold below.

Permit Fact Sheet Facility Description for the Carter WWTF:

- *The applicant recently constructed a new wastewater treatment system as described below to replace its existing lagoon facility.*
- *The system is designed to treat 0.06 mgd of domestic wastewater. The discharge uses the same outfall as the replaced lagoon facility and is continuous to a wetland from Outfall 001 on the Reservation. The facility was placed into operation in June 2019.*

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- *The FCPC Carter Wastewater Treatment Facility (WWTF) provides wastewater treatment services to the local community and the Casino. Lift Station #1 transfers flows from the sanitary sewer system to the WWTF via 8-inch sanitary force main to the WWTF Headworks where influent flow is measured with a magnetic flow meter.*
- *The Head works consists of a combination fine screen and grit classifier unit with a capacity of 0.4 mgd (**error, should be 0.7 million gallons per day “MGD”**). The screenings and grit are discharged into separate dumpsters for disposal. An influent composite sampler samples the influent wastewater immediately after screening.*
- *Septage from the Carter area is hauled to the WWTF site. A Septage Receiving Station with a magnetic flow meter to record septage volume and to facilitate metering of flows into the treatment process.*
- *After screening and grit removal, the wastewater flows by gravity through an 8-inch pipe to the aeration splitter box. Stop gates allow influent wastewater to be channeled into any of the three (3) aeration basins.*
- *At startup, only one (1) of the aeration basins will be in service while at design capacity, two (2) aeration basins will be used. The third aeration basin can be used in the event the other basins need to be serviced.*
- *The aeration basins are designed with anoxic and aerobic zones. Three (3) pH adjustment chemical feed skids and one (1) Phosphorus removal chemical feed skid is provided.*
- *Following aeration, the wastewater flows into one (1) of two (2) final clarifiers (**only using one clarifier right now, one on standby**). Only one (1) clarifier is required to be on-line at any given time; the second unit is provided as a backup for maintenance purposes. Following clarification, effluent flows to an Ultraviolet (UV) disinfection unit. The UV disinfection system has a design average flow of 275 gpm and a peak flow of 350 gpm.*
- *After UV disinfection, effluent is discharged to the current outfall by gravity incorporating a series of manholes. Spill plates are provided in each of the manholes to increase Dissolved Oxygen (D.O.) levels in the effluent prior to discharge.*

Jennifer Spencer added that there are two lift stations in Carter WWTF collection system.

Permit Fact Sheet Facility Description for the Stone Lake WWTP:

- *The application and plans indicate that the permittee owns and operates a 0.07 mgd wastewater treatment plant using a recirculating sand filter.*
- *Wastewater is collected via two lift stations, twelve effluent pumps, and several thousand feet of gravity sewer and force main.*
- *The Stone Lake Wastewater Facility Modifications provided for Septic Receiving, Phosphorus removal and UV disinfection. The project also redirected influent wastewater to be screened prior to further treatment with the existing Recirculating Sand Filter.*
- *To accomplish this, the project included a new metal building with wastewater treatment equipment and exterior site improvements. In addition, the project*
- *included converting the existing Controls Building to storage and adding controls to tie the Main Lift Station Controls to the Septage Receiving. The Recirculating Sand Filter stayed in*

place as-is.

- *The discharge is continuous to a wetland from outfall 001 on the Reservation.*
- *The sludge from this facility is transported to the new Carter Wastewater Treatment Facility for dewatering with the Carter sludge. Final disposal is to a municipal solid waste landfill.*

Facility/Site Information

Next, I asked some background questions. Unless noted otherwise, Bruce Johnson (Utility Manager) provided the responses in the table below.

Have any bypasses or overflows happened at the plant or in the collection system in the last year?	Stone Lake WWTP: Yes, this past spring due to snow melt. Actiflow system (phosphorus treatment) couldn't keep up, had to bypass (did not result in effluent limit exceedances). Carter WWTF: No.
Industrial Users	No, for both facilities.
Are there any plans for renovation or additional equipment to allow for increased wastewater flow?	Stone Lake WWTP: early stages of plant design for new plant (activated sludge plant). Carter WWTF: No.
Is there currently any portion of the treatment train that is non-operational?	No, for both facilities (response provided by Jennifer Spencer).
Do you accept waste from septage haulers?	No, for both facilities.
Operation schedule?	7am-5pm, Monday-Thursday, then operators on call (response provided by Jennifer Spencer).
How do you manage your biosolids?	Landfill disposal.
Responsible official	Bruce Johnson, for both facilities.
WWTP Design Capacity & Average Daily Flow	Stone Lake WWTP: Design ~ 62,000 gallons per day ("GPD"). Carter WWTF: ~ 72,000 GPD. Average flow of 20,000-25,000 GPD for both facilities.
WWTP Approx. # of residents served	Stone Lake WWTP: 156 connections. Carter WWTF: 68 connections.
Contributing (or shared) Jurisdictions	None, for both facilities.
Do you use in-house laboratory analyses?	No, except pH and dissolved oxygen ("DO"), for both facilities (response provided by Jennifer Spencer).
CBI concerns?	No.

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Locations

Location/Area	Description
Opening Conference/Interview	FCPC Utilities office near the Stone Lake WWTP
Non-DMR Reporting	
Effluent Limit Exceedance Review	
Self Monitoring	
O&M	
Flow Monitoring	
SSOs	
Pretreatment	
Physical Inspection Stone Lake WWTP	Stone Lake WWTP
Physical Inspection Carter WWTF	Carter WWTF
Closing Conference	FCPC Utilities office near the Stone Lake WWTP

SECTION II – OBSERVATIONS

Location: Interview/Non-DMR Reporting	
Observation #: DM1-OB-001	Date: 09/06/2023
Unless noted otherwise, Bruce Johnson (Utility Manager) provided the responses (in bold) below. Stone Lake WWTP: - Operation & Maintenance Plan Report submitted by January 31, 2023 (Part I.D.3.b)? Yes. - Mercury Minimization Program Status Report submitted by January 31, 2023 (Part I.D.4)? Yes. - Phosphorus Operational Evaluation Report submitted by June 30, 2020 (Part I.D.7)? Yes. *Wetland Monitoring* submitted by August 31, 2021 and, biannually thereafter (Part 1.D.9)? Yes. - Wetland Mussel Study submitted by October 1 annually (Part I.D.10)? Yes. Carter WWTF: - Phosphorus Operational Evaluation Report submitted by June 30, 2020 (Part 1.D.3) ? Yes. - Mercury Minimization Program Status Report submitted by January 31, 2023 (Part 1.D.4)? Yes. - Operation & Maintenance Plan Report submitted by January 31, 2023 (Part I.D.5.b)? Yes. *Wetland Monitoring* submitted by August 31, 2021 and biannually thereafter (Part I.D.9)? Yes. - Wetland Mussel Study submitted by October 1 annually (Part I.D.10)? Yes. *Additional Ammonia N monitoring conducted between May 15 and June 15, and report submitted every other year beginning in 2021? Yes. Are the records and reports maintained by the permittee for at least 3 years? Yes.	

Location: Interview/Effluent Limit Exceedance Review	
Observation #: DM1-OB-002	Date: 09/06/2023
Unless noted otherwise, Bruce Johnson (Utility Manager) provided the responses (in bold) below. See summary of effluent limit exceedances from October 2020 to June 2023 in Appendix 2 – Document Log).	

Stone Lake WWTP:

E.coli Effluent Limit Exceedances: May 2023, June 2023: **due to UV system computer circuit board issue. UV system repaired and placed back in service in the first week of August 2023. Also, had *E.coli* violations in July 2023. No issues in since UV system was placed back online in August** (response provided by Jennifer Spencer).

May 2022 *E.coli* Effluent Limit Exceedance: **Due to UV bulb issue** (response provided by Nate Guldán).

Carter WWTF:

April 2023 Carbonaceous Biochemical Oxygen Demand ("CBOD") Effluent Limit Exceedance: based on my review of the April 2023 Discharge Monitoring Report ("DMR"), the CBOD effluent limit exceedance appears to be data entry error (reported >5 mg/l, should have been reported as 5 mg/l).

Have all exceedances of daily effluent limits been orally reported to EPA within 24 hours: **Yes.**

Location: Interview/Self Monitoring**Observation #:** DM1-OB-003**Date:** 09/06/2023

Unless noted otherwise, Bruce Johnson (Utility Manager) provided the responses (in bold) below.

Stone Lake WWTP:

Are the influent and effluent sampling locations as specified in permit and representative of the waste stream? **Yes, influent samples collected before the fine screen** (response provided by Jennifer Spencer). **Effluent samples collected right after UV disinfection.**

How are effluent composite samples collected? **Autosampler, time-based.**

Are composite samples cooled to <4°C to properly preserve them during the compositing period? **Yes.**
Are temperature results recorded? **Yes** (response provided by Jennifer Spencer).

Are all grab samples cooled with ice, gel packs or refrigerated to <6°C from the time of collection until analysis including shipping time? **Yes.**

Carter WWTF:

Are the influent and effluent sampling locations as specified in permit and representative of the waste stream? **Yes, influent samples collected before screen; effluent samples collected before after UV disinfection, before aeration steps.**

How are effluent composite samples collected? **Autosampler, time-based.**

Are composite samples cooled to <4°C to properly preserve them during the compositing period? **Yes.**
Are temperature results recorded? **Yes.**

Are all grab samples cooled with ice, gel packs or refrigerated to <6°C from the time of collection until analysis including shipping time, if applicable? **Yes.**

I reviewed laboratory sampling/bench sheets and observed that they include flow, pH, and DO information, including the dates, times, and location of sampling. However, the sheets do not include the time of analysis and name(s) of persons collecting and analyzing samples.

Location: Interview/O&M**Observation #:** DM1-OB-004**Date:** 09/06/2023

Unless noted otherwise, Bruce Johnson (Utility Manager) provided the responses (in bold) below.

Stone Lake WWTP:

Are all treatment units operable? **Yes** (response provided by Jennifer Spencer).

Does a maintenance record system exist and include:

- As-built drawings - **Yes**.
- Maintenance history - **Yes** (response provided by Jennifer Spencer).
- Maintenance costs - **Yes**.
- Records of equipment repair and timely return to service - **Yes**.
- SOP for operation and maintenance of each item of major equipment - **Yes, bound copies of all major equipment and sampling procedures**.
- Operation and maintenance manual is available - **Yes**.

Are qualified operating staff employed to carry out the operations at the facility? **Yes, three certified operators for wastewater, and two in training**.

Is sludge wasted from treatment system at proper time intervals to maintain process efficiency? **Yes, once every two months**.

On a regular basis, do operators monitor the key operating parameters and conducting the necessary adjustments to meet the limits of the Permit? **Yes, operators conduct routine visual assessments and test for sludge characteristics, such as mixed liquor and suspended solids**.

Does the wastewater treatment facility have an alarm system for all essential equipment? **Yes, SCADA with many alarms, including high and low tank levels, and power outage** (response provided by Jennifer Spencer).

Are alarms sent to qualified personnel who can respond immediately to remedy the problem? **Yes, via email or call to on-call operator, then a call chain** (to Jennifer Spencer and Nate Guldán; response provided by Jennifer Spencer).

Are routine and preventive maintenance scheduled performed and recorded? **Working on routine and preventive maintenance process improvement and recording. Implementing new work order process** (response provided by Jennifer Spencer).

Does the facility maintain written procedures for responding to emergencies such as power failures, floods, fires, and other natural disasters? **Yes** (response provided by Jennifer Spencer).

Is a logbook kept which documents all plant activities on a daily basis? **Yes, use many log sheets for different stations. Also use some notebooks** (response provided by Jennifer Spencer). See Appendix 2 – Document Log, pages 26-28, for examples of log sheets.

Does the facility maintain an inventory of spare parts, either at the facility or close by, sufficient to keep all of its treatment units operational? **Not yet, to be implemented with new work order system**.

Does the facility have standby power for all treatment units? **Yes, generator at the plant, and a portable generator for lift station 2. Lift station 1 has backup generator**.

Collection System Info:

- Miles of conveyance: 11,650 feet of force main; 46,700 feet of gravity sewers.

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- Number of lift stations: 2.
- Residents served: About 150 connections, not sure about the number of residents.

Carter WWTF:

Are all treatment units operable? **Yes** (response provided by Jennifer Spencer).

Does a maintenance record system exist and include:

- As-built drawings - **Yes**.
- Maintenance history - **Yes** (response provided by Jennifer Spencer).
- Maintenance costs - **Yes**.
- Records of equipment repair and timely return to service - **Yes**.
- SOP for operation and maintenance of each item of major equipment - **Yes, bound copies of all major equipment and sampling procedures**.
- Operation and maintenance manual is available - **Yes**.

Are qualified operating staff employed to carry out the operations at the facility? **Yes, three certified operators for wastewater, and two in training**.

On a regular basis, do operators monitor the key operating parameters and conducting the necessary adjustments to meet the limits of the Permit? **Yes, operators conduct routine visual assessments and test for sludge characteristics, such as mixed liquor and suspended solids**.

Does the wastewater treatment facility have an alarm system for all essential equipment? **Yes, SCADA with many alarms, including high and low tank levels, and power outage** (response provided by Jennifer Spencer).

Are alarms sent to qualified personnel who can respond immediately to remedy the problem? **Yes, via email or call to on-call operator, then to call chain** (to Jennifer Spencer and Nate Guldán; response provided by Jennifer Spencer).

Are routine and preventive maintenance scheduled performed and recorded? **Working on routine and preventive maintenance process improvement and recording. Implementing new work order process** (response provided by Jennifer Spencer).

Does the facility maintain written procedures for responding to emergencies such as power failures, floods, fires, and other natural disasters? **Yes** (response provided by Jennifer Spencer).

Is a logbook kept which documents all plant activities on a daily basis? **Yes, use many log sheets for different stations. Also use some notebooks** (response provided by Jennifer Spencer). See Appendix 2 – Document Log, for examples of log sheets.

Does the facility maintain an inventory of spare parts, either at the facility or close by, sufficient to keep all of its treatment units operational? **Not yet, to be implemented with new work order system**.

Does the facility have standby power for all treatment units? **Yes, backup generator at the plant, one of two lift stations has a backup generator, the other needs a portable generator (Lift Station#2 only serves a few houses)**.

Collection System Info:

Miles of conveyance: 29,548 feet of force main; 49,558 feet of gravity sewers.

Number of lift stations: 2.

Residence served: About 68 connections, not sure about the number of residents.

Location: Interview/Flow Monitoring	
Observation #: DM1-OB-005	Date: 09/06/2023
Unless noted otherwise, Bruce Johnson (Utility Manager) provided the responses (in bold) below. Stone Lake WWTP: What type of influent meter is used? mag meter. What type of effluent meter is used? mag meter. Are influent and effluent flow measuring devices professionally calibrated, at least once per year? Yes, annually in September (response provided by Jennifer Spencer). Carter WWTF: What type of influent meter is used? mag meter. What type of effluent meter is used? mag meter. Are influent and effluent flow measuring devices professionally calibrated, at least once per year? Yes, annually in September (response provided by Jennifer Spencer).	

Location: Interview/SSOs	
Observation #: DM1-OB-006	Date: 09/06/2023
Bruce Johnson (Utility Manager) provided the responses (in bold) below. See Appendix 2 – Document Log, for SSO notification procedures. Stone Lake WWTP: Have there been any backups or overflows in the sanitary sewer collection system, including pump stations, manholes and piping since the last inspection? No. Basement backup complaints over the last year? No, other than issues with the individual septic systems. Carter WWTF: Have there been any backups or overflows in the sanitary sewer collection system, including pump stations, manholes and piping since the last inspection? No. Basement backup complaints over the last year? No.	

Location: Interview/Pretreatment	
Observation #: DM1-OB-007	Date: 09/06/2023
Bruce Johnson (Utility Manager) provided the responses (in bold) below. Stone Lake WWTP: Any industrial users? No. Carter WWTF: Any industrial users? No.	

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Location: Physical Inspection of Carter WWTF		
Observation #: DM1-OB-008	Date: 09/06/2023	Weather: rainy
Carter WWTF: Physical inspection observations are documented in the Photo Log (see Appendix 1). The physical inspection started: 2:15 PM (CT) and ended: 2:48 PM (CT). The final outfall was not accessible for observation. After the physical inspection of the Carter WWTF, we returned to the Stone Lake WWTP to conduct the physical inspection of the Stone Lake WWTP.		
Photo(s) 1. FCPC0302.JPG 2. FCPC0303.JPG 3. FCPC0304.JPG 4. FCPC0305.JPG 5. FCPC0306.JPG 6. FCPC0307.JPG 7. FCPC0308.JPG 8. FCPC0309.JPG 9. FCPC0310.JPG 10. FCPC0311.JPG		

Location: Physical Inspection of Stone Lake WWTP		
Observation #: DM1-OB-009	Date: 09/06/2023	Weather: rainy
Stone Lake WWTP: Physical inspection observations are documented in the Photo Log (see Appendix 1). The physical inspection started at: 3:10 PM (CT) and ended at: 3:30 PM (CT). The final outfall was not accessible for observation. After the physical inspection of the Stone Lake WWTP, we returned to FCPC Utilities office for the closing conference.		
Photo(s) 1. FCPC0314.JPG 2. FCPC0315.JPG 3. FCPC0316.JPG 4. FCPC0317.JPG 5. FCPC0318.JPG 6. FCPC0319.JPG 7. FCPC0320.JPG 8. FCPC0321.JPG 9. FCPC0322.JPG 10. FCPC0323.JPG		

SECTION III – SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

No sampling was conducted.

SECTION IV - AREAS OF CONCERN

Preliminary Areas of Concern may not be in sequential order.

The presentation of Areas of Concern does not constitute a formal compliance determination or violation.

AOC Reference #: DM1-OB-002	Location: Interview/Effluent Limit Exceedance Review
Regulation and/or Permit Requirement Permit Part I.A. - Final Effluent Limitations and Monitoring Requirements.	
AOC: Stone Lake WWTP: <i>E.coli</i> Effluent Limit Exceedances: May 2023, June 2023: due to UV system computer circuit board issue. UV system repaired and placed back in service in the first week of August. Also, had <i>E.coli</i> violations in July 2023. No issues in since UV system was placed back online in August. Carter WWTF: April 2023 CBOD Effluent Limit Exceedance: based on review of the April 2023 DMR, the CBOD effluent limit exceedance appears to be data entry error (reported >5 mg/l, should have been reported as 5 mg/l).	

AOC Reference #: DM1-OB-003	Location: Interview/Self Monitoring
Regulation and/or Permit Requirement Permit Part II.B.1. – Proper O&M. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures.	
AOC: Stone Lake WWTP and Carter WWTF: Laboratory sampling/bench sheets do not include the time of analysis and name(s) of persons collecting and analyzing samples (see Appendix 2 – Document Log, pages 26-28, for examples).	

AOC Reference #: DM1-OB-004	Location: Interview/O&M
Regulation and/or Permit Requirement 1) Permit Part I.D.3.a.G.- Inventory and assessment of fixed assets. 2) Permit Part I.D.3.b.B.- Description of inspections and maintenance activities conducted and corrective actions taken during the previous year.	
AOC: Stone Lake WWTP and Carter WWTF: 1) Facility does not maintain an inventory of spare parts. 2) Facility does not have a system to record routine and preventive maintenance performed.	

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SECTION V – CLOSING CONFERENCE AND FOLLOW UP

Closing Conference

I began the closing conference with FCPC personnel at 03:30 PM (CT) on 09/06/2023. During the closing conference, I discussed the preliminary observations and Areas of Concern identified during the inspection and summarized above. Preliminary Areas of Concern have not yet been evaluated for a formal compliance determination.

I reviewed the timing for completing the inspection report and went over the documents received during the inspection (See Appendix 2 – Document Log). I received copies of records requested prior to the inspection.

I asked if there were any questions before concluding the inspection. FCPC representatives asked for an appropriate contact at EPA to discuss permit issues. I referred them to the EPA Region 5 Permits Program and provided contact information. With no further questions, we concluded the inspection at 03:45 PM (CT).

Follow Up

No follow up was required after exiting the facility on 09/06/2023.

Communication Log

No additional information received by EPA Region 5 after exiting the Facility on 09/06/2023.

SECTION VI – LIST OF APPENDICES

1. Photo Log
2. Document Log

APPENDIX 1: PHOTO LOG



Influent Autosampler (ISCO)			FCPC0302.JPG
09/06/2023 02:18 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			Geographic coordinates not available
Noted thermometer with heat sink.			



Headworks - Vortex screen			FCPC0303.JPG
09/06/2023 02:18 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			Geographic coordinates not available



Aeration Basin (Northern basin)			FCPC0304.JPG
09/06/2023 02:20 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			Geographic coordinates not available
One of three aeration basins (only one needed at time of inspection, based on flows)			



Sludge digester			FCPC0305.JPG
09/06/2023 02:21 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			45.40133833, -88.62643666
One of two digestors.			

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Aeration blowers			FCPC0306.JPG
09/06/2023 02:22 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			45.40133166, -88.62624166
Blowers (4) for aeration basins and digestors.			



Clarifier			FCPC0307.JPG
09/06/2023 02:23 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			45.40145833, -88.62622499
One of two clarifiers. Only one clarifier in use at the time of inspection, based on flows.			

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Clarifier			FCPC0308.JPG
09/06/2023 02:24 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			45.40145833, -88.62622499
Noted effluent trough appeared clear and free of debris.			



UV Treatment System			FCPC0309.JPG
09/06/2023 02:25 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			45.40145833, -88.62622499
UV treatment consists of eight bulbs.			

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Effluent Autosampler (ISCO)			FCPC0310.JPG
09/06/2023 02:25 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			45.40145833, -88.62622499
Noted thermometer with heat sink. Effluent tubing clean and clear of debris.			



Chemical feed system			FCPC0311.JPG
09/06/2023 02:27 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Carter WWTF			45.40145833, -88.62622499
Chemical feed for aluminum sulfate and sodium hydroxide.			



<i>Influent Autosampler (ISCO)</i>			FCPC0314.JPG
09/06/2023 03:13 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			Geographic coordinates not available



<i>Headworks – fine screen</i>			FCPC0315.JPG
09/06/2023 03:14 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			Geographic coordinates not available

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<i>Sand filter beds</i>			FCPC0316.JPG
09/06/2023 03:16 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			45.56948, -88.85437499
Three sand filter beds. Beds appeared well maintained. Jennifer Spencer said sand filter beds are maintained weekly.			



<i>Actiflo treatment unit</i>			FCPC0317.JPG
09/06/2023 03:18 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			45.56948, -88.85437499
According to the manufacturer (Veolia), the Actiflo system provides high-rate clarification based on ballasted flocculation using microsand and polymers.			



UV treatment system			FCPC0318.JPG
09/06/2023 03:19 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			45.56948, -88.85437499

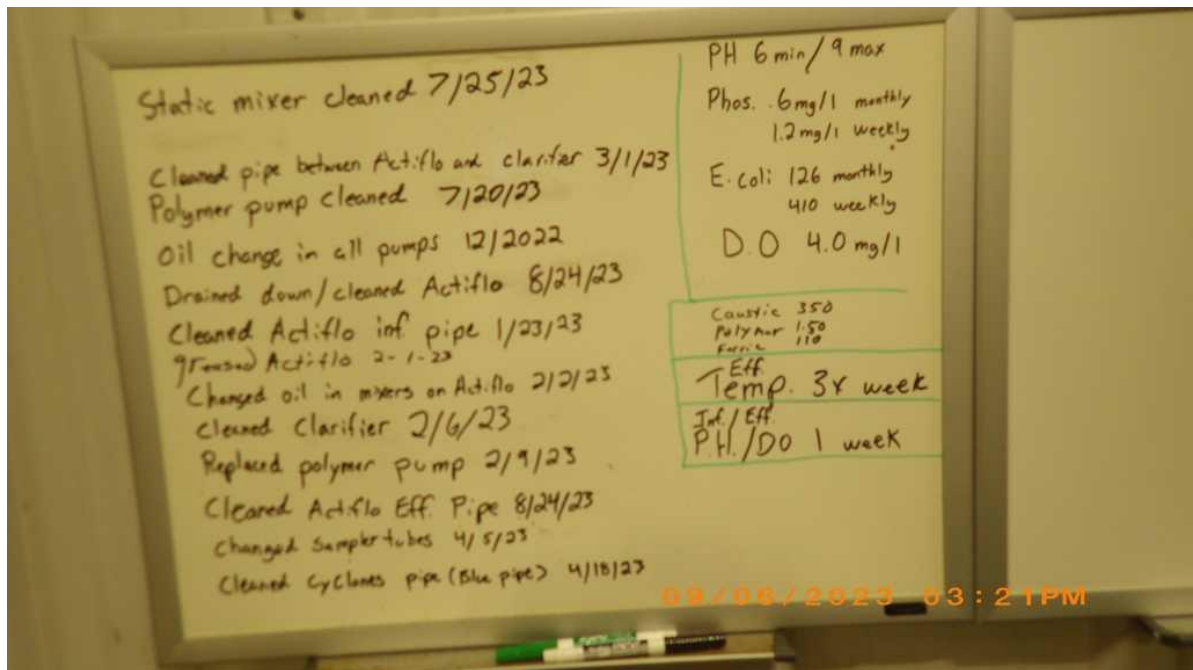


Effluent Autosampler (ISCO)			FCPC0319.JPG
09/06/2023 03:19 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			45.56948, -88.85437499
Noted thermometer with heat sink. Effluent tubing clean and clear of debris.			

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Effluent flow meter and tap			FCPC0320.JPG
09/06/2023 03:21 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			45.56948, -88.85437499



Operations whiteboard with operator notes			FCPC0321.JPG
09/06/2023 03:21 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			45.56948, -88.85437499



Phosphorus sludge tanks (2)			FCPC0322.JPG
09/06/2023 03:22 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			45.56948, -88.85437499



SCADA Display			FCPC0323.JPG
09/06/2023 03:25 PM	No CBI	No PII	Photographer: Dean Maraldo
Physical Inspection Stone Lake WWTP			45.56948, -88.85437499

APPENDIX 2: DOCUMENT LOG**Documents Received**

Document Name	Contains CBI or PII	Date Received	Pages	Attached to Report?
Emails reporting treatment and reporting issues to EPA (12/2022-5/2023)	No	9/6/2023	5	No
Carter Utility maps and plans	Yes*	9/6/2023	207	No
Stone Lake Utility maps and plans	Yes*	9/6/2023	687	No
SSO notification procedures	No	9/6/2023	1	Yes
Chain of custody forms (June-August 2023)	No	9/6/2023	455	No
Examples of operator records and lab forms	No	9/6/2023	6	Yes
Operator certificates	No	9/6/2023	8	No
Carter WWTF facility specifications and drawings	Yes*	9/6/2023	>1000	No
Carter WWTF generator Info	No	9/6/2023	34	No
NPDES permits and application records for Carter WWTF and Stone Lake WWTP	No	9/6/2023	146	No
DMRs (August 2022 – June 2023)	No	9/6/2023	89	No
Mercury Status Reports 2022 (Stone Lake WWTP and Carter WWTF)	No	9/6/2023	32	No
O&M Reports 2022 (Stone Lake WWTP and Carter WWTF)	No	9/6/2023	15	No
Phosphorus Sludge Reports 2022 (Stone Lake WWTP and Carter WWTF)	No	9/6/2023	6	No
Wetland Mussel Reports 2022 (Stone Lake WWTP and Carter WWTF)	No	9/6/2023	14	No
EPA ECHO Effluent Limit Exceedance Summary Report (10/2020-6/2023)	No	Provided by EPA	1	Yes

* Documents not included in report to protect against disclosure of potentially sensitive infrastructure locations.

Effluent Limit Exceedances Report

WI0058424: CRANDON RECIRCULATING SAND FILTER/STONE LAKE WWTP, CRANDON, WI 54520

Monitoring Period Date Range: 10/01/2020 to 06/30/2023

Exceedance Details

Monitoring Period Date	Outfall	Parameter Description	Limit Type	DMR Value	dmr_valu e_qualifie r	DMR Value Unit	Limit Value	Limit Value Qualifier	% Exceedance
10/31/2020	1	Phosphorus, total (as P)	MO AVG	0.63	=	mg/L	0.6	<=	5
3/31/2021	1	pH	MINIMUM	5.3	=	SU	6	>=	
5/31/2022	1	E. coli	30DA GM	217	=	#/100mL	126	<=	72
5/31/2022	1	E. coli	DAILY MX	690	=	#/100mL	410	<=	68
7/31/2022	1	Oxygen, dissolved (DO)	DAILY MN	3.6	=	mg/L	4	>=	10
5/31/2023	1	E. coli	30DA GM	373	=	#/100mL	126	<=	196
5/31/2023	1	E. coli	DAILY MX	1400	=	#/100mL	410	<=	241
6/30/2023	1	E. coli	30DA GM	1950	>	#/100mL	126	<=	Limit Violation
6/30/2023	1	E. coli	DAILY MX	2500	=	#/100mL	410	<=	510

Effluent Limit Exceedances Report
WI0058432: FCPC CARTER WTF
Monitoring Period Date Range: 10/01/2020 to 06/30/2023

Exceedance Details

Monitoring Period Date	Outfall	Parameter Description	Limit Type	DMR Value	dmr_value_ qualifier	DMR Value Unit	Limit Value	Limit Value Qualifier	% Exceedance
3/31/2021	1	pH	MAXIMUM	8.8	=	SU	8.5	<=	
4/30/2023	1	BOD, carbonaceous, 05 day, 20 C	MO AVG	5	>	mg/L	20	<=	Limit Violation

**Sample
Temperature**

MONTH July

YEAR 2023

[illegible]

Make/Model Thermo Serial Number _____

Serial Number.

Date	Time	pH 4	pH 7	pH 10	Slope %	Analyst
3-20-23	6:40	4.00	7.03	10.12	94.2	SH
3-28-23	7:30	4.00	7.05	10.16	94.2	mb
4-4-23	6:35	4.00	7.04	10.15	92.9	mb
4-11-23	6:15	4.00	7.03	10.10	94.2	mb
4-18-23	7:04	4.00	7.03	10.11	93.8	mb
4-29-23	8:41	4.00	7.03	10.11	92.5	KV
5-2-23	6:30	4.00	7.03	10.11	96.7	SH
5-16-23	6:50	4.00	7.02	10.08	94.0	SH
5-23-23	6:41	4.00	7.02	10.08	95.5	mb
6-6-23	6:38	4.01	7.01	10.04	96.9	SH
6-13-23	7:10	4.00	7.02	10.08	95.1	SH
6-21-23	10:15	4.01	7.01	10.06	95.7	SH
6-26-23	7:28	4.01	7.01	10.06	95.1	mb
7-5-23	9:11	4.01	7.00	10.04	96.4	mb
7-11-23	7:15	4.00	7.01	10.06	96.2	SH
7-18-23	7:53	4.00	7.02	10.07	94.9	mb
7-25-23	7:18	4.01	7.01	10.06	96.3	mb
8-1-23	6:33	4.00	7.01	10.06	95.0	mb
8-8-23	7:31	4.00	7.01	10.06	96.4	mb
8-15-23	7:18	4.00	7.02	10.07	95.9	mb
8-22-23	8:00	4.00	7.01	10.06	94.6	SH

DAILY pH METER CALIBRATION

Make/Model Thermo

Serial Number _____

Date Electrode put into Service _____

Date	Time	pH 4	pH 7	pH 10	Slope %	Analyst	Comments
12-6-21	9:00	4.00	7.05	10.17	94.3	SH	
12-13-21	8:00	4.00	7.03	10.12	94.3	SH	
12-20-21	9:52	4.00	7.03	10.12	94.1	MP	
12-27-21	12:00	4.00	7.03	10.12	96.2	SH	
1-3-22	10:00	4.00	7.03	10.12	95.2	KM	
1-10-22	9:00	4.00	7.04	10.13	95.0	SH	
1-11-22	9:58	4.00	7.04	10.13	95.5	TL	
1-19-22	9:30	4.00	7.04	10.15	95.8	SH	
1-24-22	8:57	4.00	7.03	10.13	93.9	KM	
1-31-22	8:35	4.00	7.07	10.13	94.9	KM	
2-7-22	10:30	4.00	7.03	10.13	96.1	SH	
2-14-22	10:15	4.00	7.03	10.13	94.1	SH	
2-22-22	8:45	4.00	7.03	10.13	91.5	SH	
2-28-22	9:00	4.00	7.04	10.13	95.5	SH	
3-7-22	8:30	4.00	7.03	10.12	94.6	SH	
3-14-22	9:09	4.00	7.03	10.12	94.9	TL	
3-21-22	9:37	4.00	7.02	10.10	94.7	SH	
3-28-22	9:30	4.00	7.02	10.13	95.3	SH	
4-4-22	9:00	4.00	7.03	10.10	95.7	SH	
4-11-22	8:15	4.00	7.02	10.10	94.3	SH	
4-19-22	9:45	4.00	7.03	10.11	95.1	SH	
4-25-22	8:53	4.00	7.03	10.09	94.5	TL	
5-2-22	9:15	4.00	7.02	10.09	94.7	SH	
5-9-22	9:38	4.00	7.02	10.09	92.2	MP	
5-16-22	10:00	4.00	7.02	10.07	95.1	SH	
5-31-22	9:00	4.01	7.01	10.05	92.0	SH	
6-6-22	9:15	4.01	7.01	10.06	96.7	SH	
6-13-22	8:30	4.10	7.02	10.08	94.7	SH	
6-20-22	1:30	4.01	7.01	10.05	95.8	SH	
6-27-22	8:45	4.01	7.01	10.05	92.6	SH	
7-5-22	9:15	4.01	7.01	10.05	96.8	SH	
7-11-22	10:15	4.01	7.01	10.04	96.4	SH	
7-18-22	6:30	4.01	7.01	10.04	95.5	SH	

All measurements made at room temperature.

Instrument standardized with known buffer solutions. Three commercially prepared

DAILY pH METER CALIBRATION

Make/Model Thermo Serial Number _____

Date Electrode put into Service _____

Date	Time	pH 4	pH 7	pH 10	Slope %	Analyst	Comments
8-1-22	10:06	4.01	7.01	10.04	95.2	KM	
8-1-22	8:00	4.01	7.00	10.04	94.9	MB	
8-15-22	1:45	4.01	7.01	10.05	96.2	MB	
8-22-22	7:03	4.01	7.01	10.04	94.8	MB	
8-29-22	8:06	4.01	7.01	10.06	95.3	TZ	
9-6-22	8:40	4.00	7.02	10.07	94.5	MB	
9-12-22	6:31	4.01	7.01	10.05	94.8	MB	
9-19-22	7:10	4.00	7.02	10.05	95.3	MB	
9-26-22	7:01	4.00	7.01	10.05	94.9	MB	
10-3-22	7:00	4.00	7.02	10.07	94.3	SH	
10-11-22	6:30	4.00	7.02	10.09	95.3	MB	
10-17-22	7:15	4.00	7.02	10.10	95.3	SH	
10-24-22	7:30	4.00	7.02	10.09	94.9	MB	
10-31-22	7:09	4.00	7.02	10.09	94.9	SH	
11-7-22	7:00	4.00	7.03	10.11	95.2	MB	
11-14-22	7:25	4.00	7.05	10.16	93.3	SH	
11-21-22	6:40	4.00	7.03	10.12	94.5	MB	
11-28-22	7:56	4.00	7.03	10.11	95.1	MB	
12-5-22	7:41	4.00	7.03	10.12	93.7	MB	
12-12-22	7:00	4.00	7.03	10.12	93.5	MB	
12-19-22	6:40	4.00	7.03	10.12	94.5	MB	
12-27-22	7:10	4.00	7.03	10.12	94.3	MB	
1-3-23	6:35	4.00	7.03	10.12	93.6	MB	
1-9-23	7:37	4.00	7.03	10.12	94.7	MB	
1-17-23	6:25	4.00	7.03	10.12	95.2	MB	
1-23-23	6:31	4.00	7.03	10.12	94.2	MB	
1-30-23	6:40	4.00	7.03	10.12	94.2	MB	
2-6-23	6:29	4.00	7.06	10.20	93.5	MB	
2-13-23	6:27	4.00	7.03	10.12	92.7	MB	
2-21-23	6:24	4.00	7.03	10.12	93.6	SH	
2-28-23	6:30	4.00	7.03	10.12	93.3	SH	
3-6-23	7:45	4.00	7.03	10.11	94.6	SH	
3-13-23	6:30	4.00	7.03	10.12	92.0	SH	

All measurements made at room temperature.

Instrument calibrated with known buffer solutions. Three commercially prepared

1.2	1,400	SH	2-15-23
1.2	2,700	SH	3-16-23
1.2	5,800	SH	4-5-23
1.2	1,500	SH	4-6-23
1.2	7,600	SH	4-13-23
1.2	4,600	SH	6-8-23
1.2	1,700	SH	6-29-23
1.2	6,700	SH	7-12-23
1.2	2,200	SH	7-13-23
1.2	2,000	SH	7-20-23
1.2	8,900	SH	7-26-23
1.2	3,600	SH	7-27-23
1.2	5,000	SH	
Jenny Data ↑			
1.2	5,400	MB/SH	8-9-23
1.2	1,600	MB	8-10-23
1.2	8,800	MB/SH	8-17-23

GEN. SET: Carter WWTP

[illegible]

#4 Operational Records

enter

ment

Sanitary Sewer Overflow (SSO) Procedure

In the event of any SSO, please follow the below steps in compliance with the NPDES Discharge Permit:

1. Notify immediate supervisor of event
2. Supervisor will notify the EPA in accordance with the NPDES permit:
 - a. Report any noncompliance which may endanger health or the environment, within 24 hours from the time the permittee becomes aware of the circumstances by calling 312-886-6106. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances to address mentioned in the permit.
 - b. Written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.