

INSPECTION REPORT

Inspection Entry Date/Time	09/06/2023 08:06 AM (CT)	Announced: Yes	
Inspection Exit Date/Time	09/06/2023 10:45 AM (CT)	Access: Granted	
Weather			
Media	Water		
Statute(s)/Program(s)	Clean Water Act, NPDES, WWTP		
Type of Inspection	Compliance Evaluation Inspection (CEI)		
Permittee Name	Sokaogon Chippewa Community		
Facility or Site Name	Sokaogon Chippewa Community Wastewater Treatment System		
Facility/Site Physical Address	3051 Sand Lake Road		
City, State, Zip Code	Crandon, WI 54520		
County/Borough/Parish			
Facility GPS Coordinates	45.484938, -88.963972		
FRS ID	110064633794		
Permit Number(s) (If Applicable)	WI0071501		
SIC and/or NAICS	4952		
Regulatory Representatives Participating in Inspection:			
Title	Name	Organization	
Inspector	Ray Cullen	EPA REGION 5	
Lead Inspector:			
Dean Maraldo	[Signature] DINO MARALDO Digitally signed by DINO MARALDO Date: 2023.09.12 14:50:01 -05'00'		
	EPA REGION 5	Maraldo.Dean@epa.gov	(312) 353-2098
Supervisor Review:			
Ryan Bahr	[Signature] RYAN BAHR Digitally signed by RYAN BAHR Date: 2023.09.12 17:20:18 -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 Sokaogon Chippewa Community Wastewater Treatment System (the “Facility”), located at 3051 Sand Lake Road, Crandon, WI 54520, at 08:06 AM (CT) on 09/06/2023 for an announced inspection. I, along with EPA REGION 5 inspector Ray Cullen, presented our inspector credentials to Tina VanZile and informed them that this was an 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 Facility representatives, direct observations made by the 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, measurements taken by EPA REGION 5 inspectors, verbal or written statements made by information supplied by Facility representatives during or subsequent to the on-site Inspection, and materials, processes, data, photographs, or documents shown, demonstrated, or submitted to the EPA REGION 5 inspectors by Facility representatives during or subsequent to the on-site Inspection. In addition, information gathered prior to or subsequent to the Inspection 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
Sokaogon Chippewa Community	Jake McGeshick	Operator	No	No
Sokaogon Chippewa Community	Jackie Braun	Environmental Assistant	Yes	Yes
Sokaogon Chippewa Community	Kenneth McNinch	Utilities Director	Yes	Yes
Sokaogon Chippewa Community	Tina VanZile	Environmental Director	Yes	Yes
Indian Health Service	Shane Hoffman, P.E.	Tribal Utility Consultant	No	Yes

Facility/Site Description

I began by reviewing the Facility description provided in the current permit (excerpt below) and the Facility representatives confirmed the information as described below.

Permit Fact Sheet Facility Description:

- *The application and plans indicate that the permittee owns and operates a 0.09 million gallons per day (“MGD”) wastewater treatment system.*
- *The system consists of fine screening followed by septic tanks (2 primary and 2 secondary), recirculating sand filter beds (4) and ultraviolet disinfection.*
- *The discharge is continuous to a subsurface discharging system 50 feet from the edge of a wetland on the Mole Lake Indian Reservation.*
- *The subsurface discharge almost immediately surfaces from the foot of the system and flows over riprap directly to Wetland 22.*

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- Sludge generated at the facility is hauled offsite by a private hauler when needed and land applied.
- The treatment system serves the Sokaogon Chippewa Community and Casino/Hotel.

Facility Information

Next, I asked some background questions. Unless noted otherwise, Ken McNinch (Utility Director) provided the responses in the table below.

Responsible official?	Ken McNinch
How do you manage your biosolids?	This year had some sludge removed and disposed through a private contractor, about 21,000 gallons
Have any bypasses or overflows happened at the plant or in the collection system in the last year?	No
Industrial Users?	No
Are there any plans for renovation or additional equipment to allow for increased wastewater flow?	Yes, \$1.2 million grant for new fine screen, ammonia removal, and to repair leaky walls in UV system room. Shane Hoffman (Indian Health Service) provided a copy of work summary (see Appendix 2 – Document Log)
Is there currently any portion of the treatment train that is non-operational?	Yes, fine screen is offline. Bypassing fine screen to bar screen for about 4 years. No impact on compliance with permit limits
Do you accept waste from septage haulers? If so, what problems have you experienced?	No
Do you use in-house or contract out for laboratory analyses?	Only pH and Dissolved Oxygen analyzed in-house
Operation schedule?	M-Th, 7am-5pm, operators on call 24/7
Contributing Jurisdictions?	No
WWTP Approx. # of residents served?	Tina VanZile said about 550 residents served
WWTP Design Capacity & Average Daily Flow?	86,000 gallons per day, average about 25,000-30,000 gallons per day
CBI concerns?	No

Inspection Focus Areas and Locations

Location/Area	Description
Interview	Sokaogon Chippewa Community Administration Office
Non-DMR Reports	
Effluent Limit Violation Review	
Operations and Maintenance (“O&M”)	
Self Monitoring	
Flow Monitoring	
Sanitary Sewer Overflows (“SSOs”)	
Physical Inspection	Sokaogon Chippewa Community Wastewater Treatment System
Close Out Conference	Sokaogon Chippewa Community Administration Office

SECTION II – OBSERVATIONS

Location: Interview/Non-DMR Reports	
Observation #: DM1-OB-001	Date: 09/06/2023
Unless noted otherwise, Ken McNinch provided the responses (in bold) below. Operation and Maintenance Status Report submitted by January 31, 2023 (Permit Part I.C.3.b)? Operation and Maintenance Status Report for 2022 not yet submitted. Phosphorus Management Plan Status Report submitted by January 31, 2023 (Permit Part I.C.4)? Phosphorus Management Plan Status Report for 2022 not yet submitted. Wetland Protection/Monitoring Plan Progress Report submitted by January 31, 2023 (Permit Part I.C.7.c)? Yes. Are the records and reports maintained by the permittee for at least 3 years? Permit records kept “indefinitely”.	

Location: Interview/Effluent Limit Violation Review	
Observation #: DM1-OB-002	Date: 09/06/2023
I provided Ken McNinch and Tina VanZile with a list of permit effluent limit exceedances, and we discussed the causes of each exceedance (See Appendix 2 – Document Log, for summary of effluent limit exceedances). The causes of recent exceedances are described below. N-ammonia exceedances: winter 2019 and 2021; Ken McNinch attributed exceedances to cold temperatures. He said they now use molasses and lime supplements in winter. <i>E.coli</i> exceedances: May 2020; May 2022: Ken McNinch attributed exceedances to UV bulb issues. He said they ran out of UV bulbs (COVID supply issue). Now, they keep extra bulbs. I asked if all noncompliance which may endanger health or the environment, including all violations of daily limits, have been orally reported within 24 hours. Ken McNinch said he wasn’t sure.	

Location: Interview/O&M	
Observation #: DM1-OB-003	Date: 09/06/2023
Unless noted otherwise, Ken McNinch provided the responses (in bold) to the questions below. - Are all treatment units operable? Yes, except fine screen. - Maintenance record system exists and includes: - As-built drawings? Yes. - Maintenance history? Currently just started taking maintenance notes in a small notebook. Provided copy of list of things to do to improve O&M (See Appendix 2 – Document Log). - Maintenance costs? Tina VanZile said maintenance costs tracked by accounting department. - SOP for operation and maintenance of each item of major equipment. Not yet.	

- Operator certifications? **Facility employs two operators, Ken McNinch (Wisconsin certifications for recirculating multimedia filters and biological treatment), and Jake McGeshick, operator in training (not yet certified for wastewater).**
- On a regular basis, do operators monitor the key operating parameters and conducting the necessary adjustments to meet the limits of the Permit? **Yes, conduct routine ammonia and phosphorus testing.**
- Does the wastewater treatment facility have an alarm system for all essential equipment? **Yes, alarms include generator kick on, high flow for dosing tanks, high level screen room, and lift stations levels (all but two lift stations are alarmed, however, the others will be soon via a new project).**
- Are alarms sent to qualified personnel who can respond immediately to remedy the problem? **Yes, to both operators.**
- Does the Facility maintain written procedures for responding to emergencies such as power failures, floods, fires, and other natural disasters? **Yes, they have an Emergency Response Plan, but it needs to be updated.**
- Is a logbook kept which documents all plant activities on a daily basis? **Yes, currently use small notebook, but moving to a more formal written process.**
- 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.**
- Does the Facility have standby power for all treatment units? ((40CFR122.41(e). **Yes, they have a generator the plant, automatically exercised every Monday. Four lift stations have backup generators. Total of 6 lift stations. Working on obtaining a generator for Youth Center lift station.**

Sewer collection system overview:

- miles of conveyance? **Shane Hoffman estimated 7-8 miles of conveyance.**
- Number of lift stations? **6**
- Number of connections/residents served? **approximately 550 residents, about 150 houses on the system according to Tina VanZile.**

Location: Interview/Self Monitoring

Observation #: DM1-OB-004

Date: 09/06/2023

Ken McNinch provided the responses (in bold) to the questions below.

Are the influent and effluent sampling locations as specified in permit and representative of the waste stream? **Yes, influent samples collected prior to screen, effluent samples collected after UV.**

Are composite samples flow proportioned? **Yes, time based.**

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

Do you record composite sampler vault temperatures? **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? **Yes.**

I reviewed the Facility's sample bench sheet for pH and dissolved oxygen. I noted that the sheet did not include the names of the operators collecting and analyzing the samples. This is necessary to confirm that samples were analyzed within holding times.

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Location: Interview/Flow Monitoring		
Observation #:	DM1-OB-005	Date: 09/06/2023
Ken McNinch provided the responses (in bold) to the questions below. 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, once per year.		

Location: Interview/SSOs		
Observation #:	DM1-OB-006	Date: 09/06/2023
Ken McNinch provided the responses (in bold) to the questions below. Have there been any backups or overflows in the sanitary sewer collection system, including pump stations, manholes and piping since the last inspection? No. Any complaint about sanitary sewer system backups or basement backups over the last year? No.		

Location: Physical Inspection		
Observation #:	DM1-OB-007	Date: 09/06/2023 Weather: Cloudy, mild
Physical Inspection observations are documented in the Photo Log (see Appendix 1). The physical inspection started at: 9:25 AM (CT), and ended at: 10 AM (CT). Returned to office for close out at 10:05 AM (CT).		
Photo(s) 1. SOKA0296.JPG 2. SOKA0293.JPG 3. SOKA0294.JPG 4. SOKA0295.JPG 5. SOKA0297.JPG 6. SOKA0298.JPG 7. SOKA0299.JPG 8. SOKA0300.JPG 9. SOKA0301.JPG		

SECTION III – SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

No sampling was conducted.

SECTION IV - AREAS OF CONCERN

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-001	Location: Interview/Facility Information
Regulation and/or Permit Requirement Permit Part II.B.3: Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation.	
AOC: Treatment bypass - fine screen is offline. Facility bypassing fine screen for about 4 years. No impact on compliance with permit effluent limits.	

AOC Reference #: DM1-OB-001	Location: Interview/Non-DMR Reports
Regulation and/or Permit Requirement Permit Part I.C. – Special Conditions, Reporting	
AOC: Operation and Maintenance Status Report for 2022 not submitted by January 31, 2023 (Permit Part I.C.3.b). Phosphorus Management Plan Status Report for 2022 not submitted by January 31, 2023 (Permit Part I.C.4).	

AOC Reference #: DM1-OB-002	Location: Interview/Effluent Exceedance Review
Regulation and/or Permit Requirement Permit Part II.D.8 – Twenty-Four Hour Reporting for Violations. The permittee shall orally report any noncompliance which may endanger health or the environment, within 24 hours from the time the permittee becomes aware of the circumstances.	
AOC: The Utility Director could not confirm that all noncompliance which may endanger health or the environment, including all violations of daily limits, have been orally reported to EPA within 24 hours.	

AOC Reference #: DM1-OB-004	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: I observed that the sample bench sheets for pH and dissolved oxygen did not include the names of the operators collecting and analyzing the samples. This is necessary to confirm that samples were analyzed within holding times.	

AOC Reference #: DM1-OB-007	Location: Physical Inspection of Facility
Regulation and/or Permit Requirement Permit Part II.B.1. – Proper O&M. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.	
AOC: Significant vegetation observed growing on surface of the sand filter (see Appendix 1, Photo Log image SOKA0296.JPG).	

SECTION V – CLOSING CONFERENCE

Closing Conference

I began the closing conference with Facility personnel at 10:08 AM (CT) on 09/06/2023. During the closing conference, I discussed the observations and preliminary Areas of Concern identified during the inspection. Observations and 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 asked if there were any questions before concluding the inspection. The Facility representatives had no further questions, and we concluded the inspection at 10:30 AM (CT).

Communication Log

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

SECTION VII – LIST OF APPENDICES

- 1. Photo Log
- 2. Document Log

APPENDIX 1: PHOTO LOG



Influent composite sampler (ISCO)			SOKA0293.JPG
09/06/2023 09:26 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.483565, -89.00204666
Note thermometer with heat sink.			



Influent flow meter monitor			SOKA0294.JPG
09/06/2023 09:27 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.483565, -89.00204666
Poor image quality. Image out of focus.			

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Headworks, fine screen and bar screen			SOKA0295.JPG
09/06/2023 09:28 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.48367833, -89.00236166
Fine screen was out of service for about four years, according to the Utility Director.			



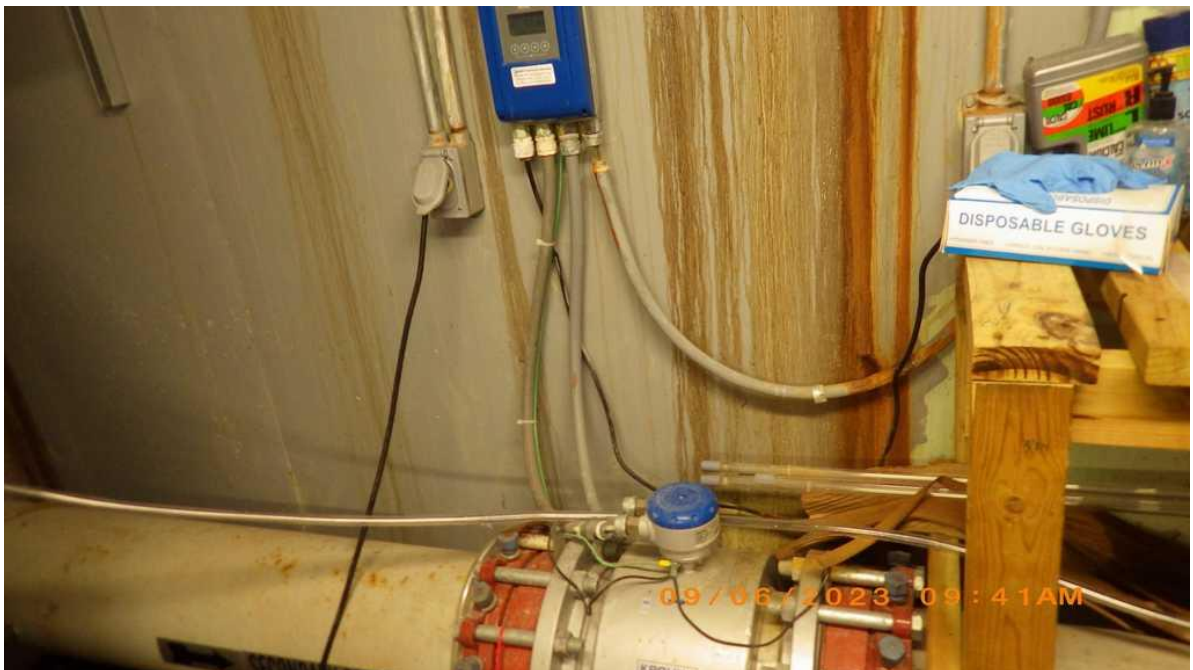
Sand Filters			SOKA0296.JPG
09/06/2023 09:38 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.48338833, -89.00243166
Sand filters covered with vegetation and requires maintenance.			

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<i>Dosing tank pad and UV Room</i>			SOKA0297.JPG
09/06/2023 09:40 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.48310666, -89.00321
Dosing tanks located under concrete pad.			



<i>Effluent flow meter and monitor in UV Room</i>			SOKA0298.JPG
09/06/2023 09:41 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.48325333, -89.00302
Effluent meter read 18.3 gallons per minute (about 26,352 gallons per day).			

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Effluent composite sampler (ISCO) in UV Room			SOKA0299.JPG
09/06/2023 09:42 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.48325333, -89.00302
Note thermometer with heat sink.			



UV Disinfection system in UV Room			SOKA0300.JPG
09/06/2023 09:44 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.48325333, -89.00302
UV bulbs are cleaned once a week.			



Facility backup generator			SOKA0301.JPG
09/06/2023 09:53 AM	No CBI	No PII	Dean Maraldo
Physical Inspection			45.48325, -89.00267
Generator automatically exercised every Monday.			

APPENDIX 2: DOCUMENT LOG

Documents Received

Document Name	Contains CBI or PII	Date Received	Pages	Attached to Report?
Indian Health Service - Estimated Dates for Upgrades	No	9/6/2023	1	Yes
EPA Summary of Effluent Limit Exceedances	No	Provided by EPA	1	Yes
O&M Improvement Plan	No	9/6/2023	2	Yes
Emergency Response Plan	No	9/6/2023	15	No*

* Document not included in report to protect potential private or personal information (e.g., home phone numbers).

Hoffmann, Shane (IHS/BEM)

From: Kohnhorst, Nathan (IHS/BEM)
Sent: Tuesday, September 5, 2023 7:01 AM
To: Hoffmann, Shane (IHS/BEM)
Subject: Mole Lake dates

Here are the estimated dates:

- Fine Screen Replacement
 - Bid received: 6/21/23
 - Substantial complete: 270 days from signed Notice to Proceed (I don't think the Notice to Proceed has been signed yet by the Tribe but estimate that to happen in Sept. 2023); this would then be June 2024 for substantial complete
- Concrete Repairs to UV chamber – estimated construction in 2024.
- Ammonia Reduction – will review treatment options with McMahon Assoc in late 2023/early 2024. In review of options with the Tribe, will determine if there is a need to implement a treatment option since the Ammonia limit was removed from the NPDES permit, reporting Ammonia is still required by the permit.
- SCADA Upgrades – will occur once fine screen install is complete to incorporate into upgrades.

Thanks
Nathan

LCDR Nathan Kohnhorst, Sr. Field Engineer
Indian Health Service
Sanitation Facilities Construction
129 North Brown St.
Rhineland, WI 54501
715-365-5117 (office)
nathan.kohnhorst@ihs.gov

Effluent Limit Exceedances Report

WI0071501: SOKAOGON CHIPPEWA WASTEWATER TREATMENT SYSTEM, CRANDON, WI 54520

Monitoring Period Date Range: 10/01/2018 to 06/30/2023

Exceedance Details

Monitoring Period Date	Outfall	Parameter Description	Limit Type	DMR Value	DMR Value Unit	Limit Value	Limit Value Qualifier	Limit Value Unit	% Exceedance
11/30/2018	1	Nitrogen, ammonia total (as N)	DAILY MX	11	mg/L	9.87	<=	mg/L	11
12/31/2018	1	Nitrogen, ammonia total (as N)	DAILY MX	13	mg/L	9.87	<=	mg/L	32
1/31/2019	1	Nitrogen, ammonia total (as N)	MO AVG	10.2	mg/L	9.87	<=	mg/L	3
1/31/2019	1	Nitrogen, ammonia total (as N)	DAILY MX	12	mg/L	9.87	<=	mg/L	22
2/28/2019	1	Nitrogen, ammonia total (as N)	MO AVG	10.4	mg/L	9.87	<=	mg/L	5
2/28/2019	1	Nitrogen, ammonia total (as N)	DAILY MX	14	mg/L	9.87	<=	mg/L	42
3/31/2019	1	Nitrogen, ammonia total (as N)	DAILY MX	16	mg/L	9.87	<=	mg/L	62
5/31/2020	1	E. coli	30DA GM	154	#/100mL	126	<=	#/100mL	22
5/31/2020	1	E. coli	DAILY MX	650	#/100mL	410	<=	#/100mL	59
2/28/2021	1	Nitrogen, ammonia total (as N)	MO AVG	10	mg/L	9.87	<=	mg/L	1
2/28/2021	1	Nitrogen, ammonia total (as N)	DAILY MX	13	mg/L	9.87	<=	mg/L	32
3/31/2021	1	Nitrogen, ammonia total (as N)	MO AVG	10.7	mg/L	9.87	<=	mg/L	8
3/31/2021	1	Nitrogen, ammonia total (as N)	DAILY MX	14	mg/L	9.87	<=	mg/L	42
5/31/2022	1	E. coli	DAILY MX	2400	#/100mL	410	<=	#/100mL	485

Sokaogon Chippewa Community O&M

Starting from here is the what I do daily.

When I pull into town to come punch in I look to see if I see any water leaks by any hydrants or where the main is running thru town.

When I get to the Wastewater Plant/ are Main Office I look to see if anyone has pulled in by the gate and usually pick up any garbage by are entrance.

When I get to the building I look for any signs of damage or trespassers overnight.

When I come in the main building I check the SCADA computer.

After the computer check I check the fine screen. Then I will do rounds.

Rounds consist of checking the raw sampler. Getting the Raw flow reading. Double check the fine screen. Turning Samplers on when testing. Checking over the whole Raw sample room for anything out of place. Then I check the Effluent room. Getting the flow reading checking the UV if it is on. Checking the sampler and the condition of the room and all equipment in the building. Turning samplers on when testing. Then I check the Sand filter to see if it is blinding out and needs to be broken up with are ATV and Disc. After checking that I look around to see if I can see any sign of trespassers over night or over the weekend. Then I go down to Are Effluent discharge area and check that to see if all is ok. Then I come check emails and phone messages.

After that is done I go check the pump house. The lifts stations. And the booster stations along with the water tower and the Stand Pipe water storage tank.

Pumphouse- check temp of building. Get the pump start and run times. Test water for chlorine residuel. Check chlorine tank and all of the inside of building.

Lift stations- get run times and start times. Temp where available. And generator run and start times on all lift stations where available.

Water tower and Stand pipe- check outside for damage and check inside of water tower for leaks. This is done Monday and Thursday.

Booster station- check outside for damage. Inside I get the run times and starts of all the pumps and the flow reading. Also get temp.

Clean UV bulbs once a week.

Monthly Checks Wastewater Plant

Samplers- clean Sampler hoses and sample jugs

Generators- check the whole thing over. If your reading this you must have some common sense so when I say check the whole thing it over it means everything. EVERYTHING!

Lift Stations- open hatch to the Shit and Such and check for Grease and the other good time things. Clean as needed. Use your head a little and determine if it needs cleaning.

For the Water part of monthly checks. The only thing I check monthly are the well Heads by the Pumphouse

Testing:

Wastewater samples get tested twice a week for CBOD, TSS, Ammonia, and Phosphorus.

Water testing is Chlorine residual daily, BacT testing monthly and the EPA sends a drinking water monitoring schedule very 3 years.