



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

March 31, 2021

Rob Wrigley
Ministry of the Environment, Conservation and Parks
733 Exeter Road
London, ON N6E 1L3

Attention: Mr. Wrigley,

RE: Annual Report 2020
Wardsville Wastewater Treatment Plant and Collection System

The Ontario Clean Water Agency is the Operating Authority for the Wardsville Wastewater Treatment Plant and Collection System on behalf of Municipality of Southwest Middlesex. The system is currently operated under Environmental Compliance Approval 7726-B2BNSA and 6045-9DKP2X. Please find attached the 2020 Annual Report for the Wardsville Wastewater Treatment Plant and Collection system.

Feel free to contact me should you require any additional information regarding the report. I can be reached at 519-312-0847.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Thomson'.

Terri-Lynn Thomson
Process and Compliance Technician
Ontario Clean Water Agency

c.c. Greg Storms, Municipality of Southwest Middlesex
Dale LeBritton, OCWA's Regional Hub Manager
Sam Smith, OCWA's Senior Operations Manager
Cindy Sigurdson, OCWA's Safety, Process and Compliance Manager
Meghan Morgan, Ministry of the Environment, Conservation and Parks

MUNICIPALITY OF SOUTHWEST MIDDLESEX

**WARDSVILLE WASTEWATER TREATMENT PLANT
AND COLLECTION SYSTEM**

2020 ANNUAL REPORT
January 1 to December 31, 2020

Environmental Compliance Approval
6045-9DKP2X
7726-B2BNSA

Prepared by:



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

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Section 1: Overview

The Wastewater Treatment Plant and the Main Pumping Station was operated under ECA 7726-B2BNSA issued On October 4th, 2018. The other two pumping stations and the SBS collection system are on a separate Environmental Compliance Approval, 6045-9DKP2X issued November 29, 2013.

Collection System

The collection system consists of a Small Bore Sewer (SBS) system rather than a conventional sanitary sewer system. This system uses on-site SBS clarifiers for each individual lot, consisting of approximately 145 residential and 6 commercial/institutional properties. The SBS clarifiers overflow into the SBS sewer system to one of the two pumping stations. The pumping stations then direct the flow to the main pumping station where the forcemain pumps the influent to the Wastewater Treatment Plant.

Plant Description

Sewage enters a splitter box equipped with a manually cleaned bar screen. The splitter box is designed for a peak flow of 1100m³/day and includes two sluice gates to divide and direct the sewage into two parallel extended aeration treatment trains. Soda ash is added at the splitter box by the chemical feed system for alkalinity adjustment.

Each individual extended aeration treatment train includes the following components:

- i) A 9m × 4.5m × 4.5m extended aeration tank sized for 24 hours detention time assuming an average daily flow of 150m³/day. The tank is designed to achieve dissolved oxygen (DO) concentration of 2mg/L.
- ii) A secondary clarifier tank sized for a peak hydraulic loading of 550m³/day together with stilling well, baffles and air lift sludge pump that directs sludge into the on-site sludge management facilities.
- iii) A continuous backwash up flow granular sand filter sized for a peak hydraulic loading rate of 550m³/day. Approximately 6 to 8% of the effluent that flows through the filter is backwashed.

The effluent from each treatment train's sand filter is combined and directed into a 1m × 5.6m × 4.5m post-aeration tank designed to achieve a DO concentration of at least 5mg/L in the effluent. Following the aeration, the effluent is directed to an in-ground chamber housing a UV disinfection system designed for a peak hydraulic flow of 1100m³/day. The outfall is located less than 500m from the sewage works and discharges to the Thames River.

Phosphorus and solids removal is achieved by the addition of aluminum sulphate (alum) from two metering pumps that inject into the aeration tanks. The alum is stored in a 3400L storage tank. Carrier water was added to the alum system to help prevent blockages and freezing of the alum lines.

The sludge management system consists of an aerobic digestion tank sized to achieve a 45 day sludge age in combination with the aeration tanks. The sludge is then transferred to the aerated sludge holding tank (250m³) sized to hold six months of sludge before it is hauled to another facility for further processing. Two blowers were added to the system, dedicated to providing air to the holding tanks.

A generator was installed November 2019 at the plant.

Section 2: Influent Monitoring Data

Sampling and Testing

All samples are collected and tested as per the requirements of the Environmental Compliance Approval.

Raw sewage is sampled once per month and tested for BOD₅, total suspended solids, total phosphorus, and total Kjeldahl nitrogen. The raw samples are collected as grab samples.

Alkalinity tests are completed on the final effluent for better operational control of the soda ash dosing.

The receiving stream temperature is monitored at the Thames River.

Raw Sewage Quality

Table 1 represents the raw sewage (influent) quality compared to the values to which the plant was designed to treat. See Appendix A for more detailed analytical data. The annual averages were below the design the criteria for all parameters except TKN. Despite the higher concentration of TKN the plant was able to meet compliance limits in the effluent for Total Ammonia Nitrogen with the exception of August.

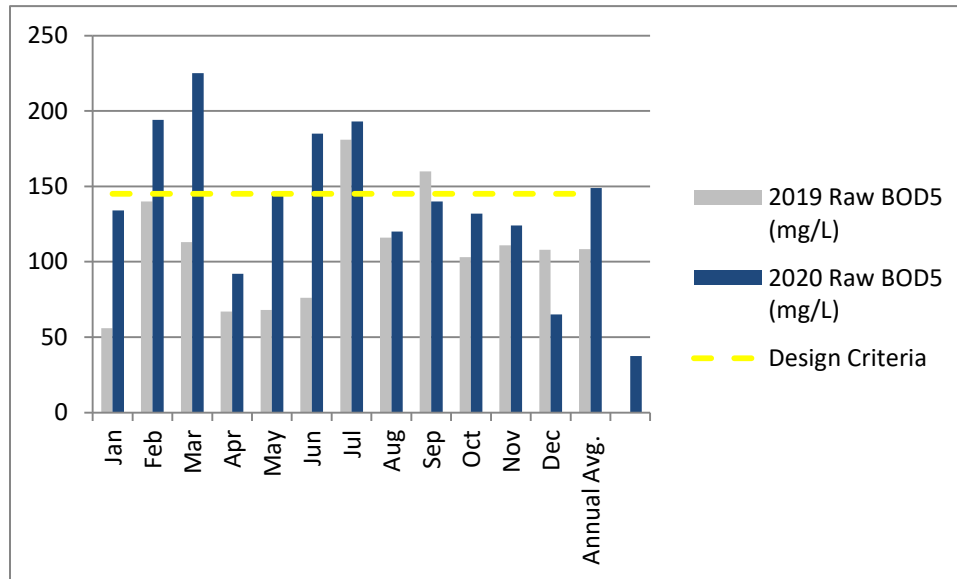
Table 1. Raw sewage annual average concentrations compared to the treatment plants design concentrations.

	BOD5 (mg/L)	TKN (mg/L)	TP (mg/L)	TSS (mg/L)
January	134.0	61.1	7.11	46
February	194	47.6	7.35	188
March	225	34.2	3.14	168
April	92	25.9	3.45	50
May	145	46.2	6.25	67
June	185	53.35	6.81	74
July	193	58.4	12.1	98
August	120	35.4	4.9	88
September	140	61.4	7.09	58
October	132	56.3	7.47	94
November	124	52.9	6.53	18

December	65	33	3.4	21
Annual Average	148.8	47.62	6.34	80.3
Design Objective	145	40	8	100
# Months Design Objective Exceeded	4/12	8/12	1/12	2/12

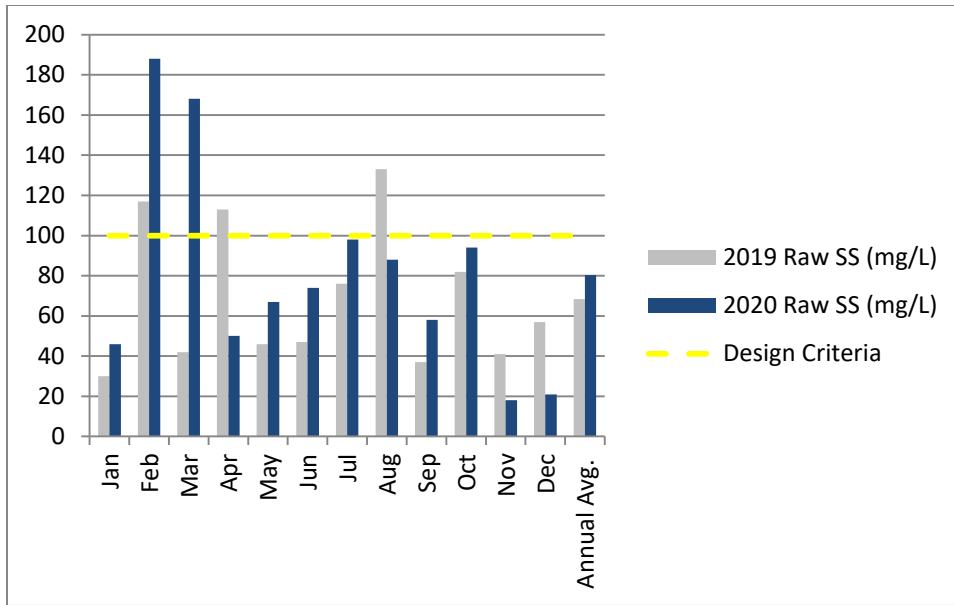
The annual average raw sewage BOD₅ concentration to the plant was 148.8mg/L with a maximum concentration of 194mg/L. The average concentration of BOD₅ has increased 37.5% from 2019, refer to Chart 1. The average BOD₅ loading to the plant was 13.7kg/d for 2020. There was four months in 2020 where the monthly average raw concentration was above the design criteria.

Chart 1. Average monthly raw sewage BOD₅ concentrations in 2020 compared to 2019 concentrations.



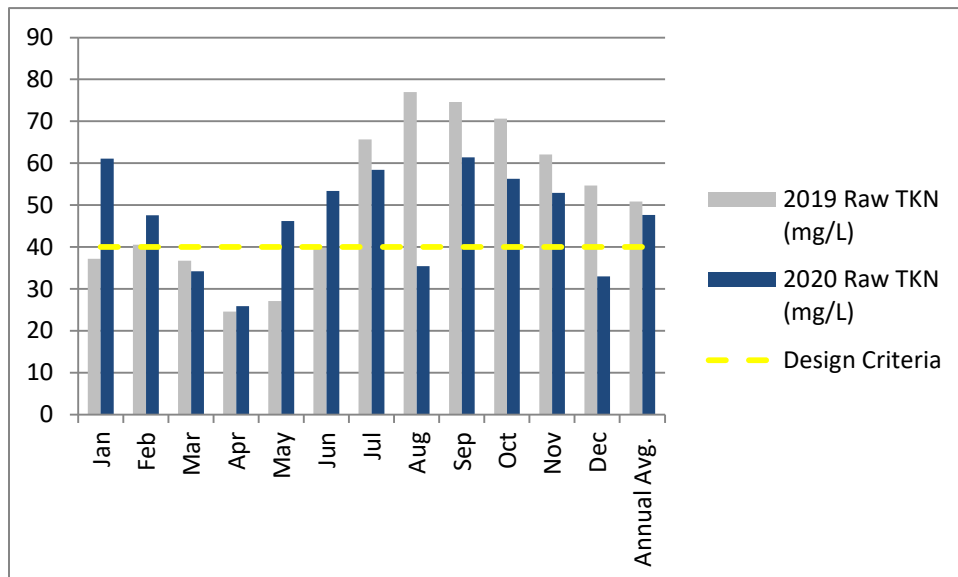
The annual average raw sewage suspended solids (TSS) concentration to the plant was 80.3mg/L, which is a 17% increase from 2019 (refer to Chart 2). This corresponds to an average TSS loading to the plant of 7.4kg/day in 2020. There were two months in 2020 the raw concentration of TSS was above the design concentration of 100mg/L

Chart 2. Average monthly raw sewage TSS concentrations in 2020 compared to 2019 concentrations.



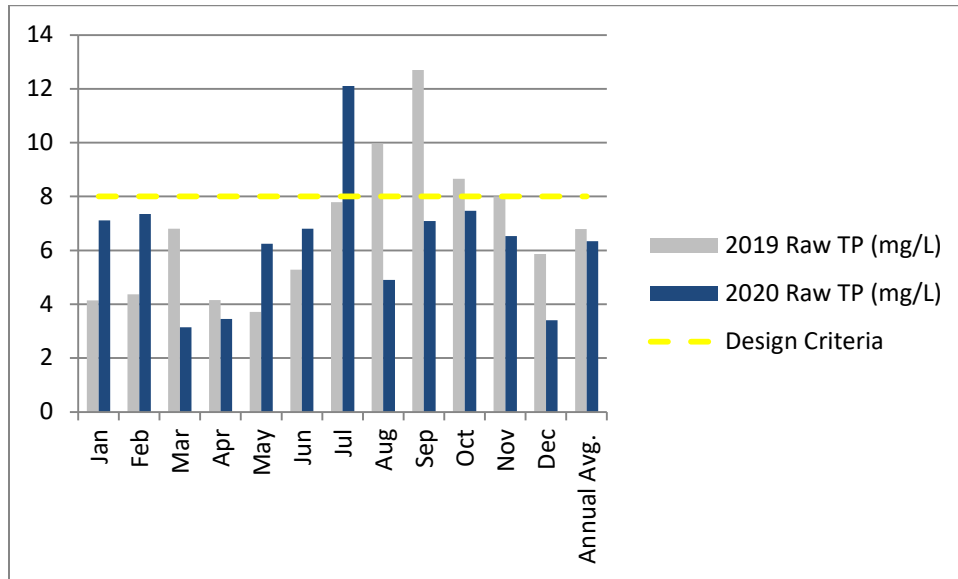
The annual average raw sewage nitrogen concentration (as represented by TKN) to the plant was 47.6mg/L with a loading of 4.39kg/d. This is a decrease of 6.6% from 2019 annual average concentration, refer to Chart 3. There were eight months in 2020 the raw concentration of TKN was above the design concentration of 40mg/L, which also resulted in the annual average above the design concentration.

Chart 3. Average monthly raw sewage TKN concentrations in 2020 compared to 2019 concentrations.



The annual average raw sewage total phosphorous (TP) to the plant was 6.3mg/L with a loading of 0.58kg/day. This represents a 6.6% decrease from 2019 annual average concentrations, refer to Chart 4. There was one month that the monthly average TP concentration was above the design criteria.

Chart 4. Average monthly raw sewage TP concentrations in 2020 compared to 2019 concentrations.

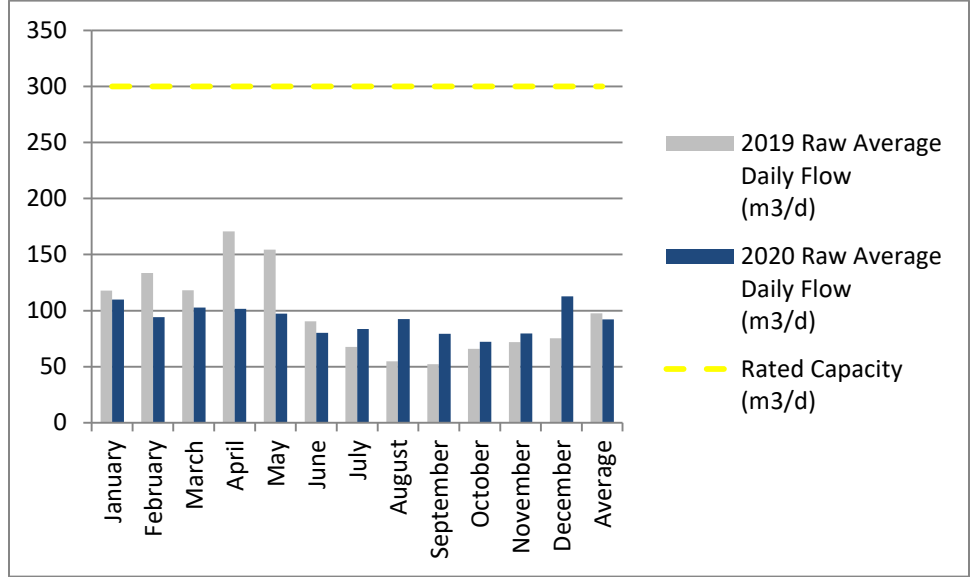


Flows

Detailed monthly flow information is summarized in Appendix A. The total flow treated in 2020 was 33,751m³, which corresponds to a 5.1% decrease from 2019 raw flows. The annual average daily flow was 92m³/day, or 30.7% of the plant's rated design capacity of 300m³/day, which is up 2.2% from 2019. Refer to Chart 5.

The design average daily flow for the plant was not exceeded in 2020; maximum daily flow was 178.5m³/d. The hydraulic peak flow of 1100m³/day for the plant was not exceeded in 2020, nor was the annual average daily flow.

Chart 5. Daily average raw flow for 2020 compared to 2019 flows.



Section 3: Effluent Monitoring Data

Final effluent is sampled weekly and tested for cBOD₅, total suspended solids, total phosphorus, and total (ammonia + ammonium) nitrogen. Samples are collected using an automatic composite sampler and collected over a twenty-four hour period. As well, a weekly grab sample for E. coli is obtained. In house grab samples are collected and tested for pH, dissolved oxygen, and temperature.

In 2020, all chemical and microbiological sample analyses were conducted by SGS Lakefield Research. Temperature, pH and dissolved oxygen were conducted by the operators at the treatment plant.

Effluent Limits

Detailed analytical data is provided in Appendix A. Table 2 summarizes the annual averages and maximum single sample results.

Table 2. Monthly average effluent concentration ranges, maximum single sample effluent results, monthly average loading ranges and maximum single sample loading compared to the effluent limits prescribed in the Environmental Compliance Approval.

Parameter	Monthly Average Effluent Limit (mg/L)	Single Sample Effluent Limit (mg/L)	Monthly Average Effluent Result Ranges (mg/L)	Maximum Single Sample Effluent Results (mg/L)	Monthly Loading Effluent Limit (kg/day)	Monthly Average Loading ranges (kg/d)	Maximum Single Sample Loading (kg/d)
cBOD ₅	10	15	<2 – 2.5	3	3.0	0.16 – 0.23	0.24
Suspended Solids	10	15	<2–8.8	26	3.0	0.16 – 0.99	2.93
Total Phosphorus	0.5(a)	1.0(a)	0.20 – 0.67	1.37	0.15 (a)	0.02 – 0.05	0.11
	1.0(b)	1.5(b)	0.39 – 0.50	0.8	0.30 (b)	0.03 – 0.05	0.08
Total (Ammonia + Ammonium) Nitrogen	3.0(a)	4.5(a)	<0.1 – 0.475	1.6	0.9 (a)	0.01 – 0.04	0.13
	5.0(b)	7.5(b)	<0.1 – 0.22	0.7	1.5 (b)	0.01 – 0.02	0.08
E. coli (cfu/100mL)	200(a)	n/a	1.68 – 3.56	n/a			
	1000(b)	n/a	1.68– 27.54				
pH	6-9.5 (at all times)		6.79 – 8.62	n/a			
Dissolved Oxygen (Minimum Conc.)	4 (at all times)		7.69 – 11.5	4.55			

NOTE:

(a) limit applies during the non-freezing period April 1 to October 31

(b) limit applies during the freezing period November 1 to March 31

Note: pH range is minimum and maximum readings for the year.

Discussion on Monitoring Data as Compared to the Effluent Limits

The annual average effluent CBOD₅ concentration in 2020 was 2.04mg/L, which is a 10% decrease from 2019. (refer to Chart 6). The annual average effluent loading for CBOD₅ in 2020 was 0.19kg/day. The monthly average and single sample limits were met in 2020 for cBOD₅. Refer to Table 2 for monthly average concentration, single sample concentration, and loading limits.

Chart 6. Monthly average concentrations of CBOD₅ in 2020 compared to 2019.

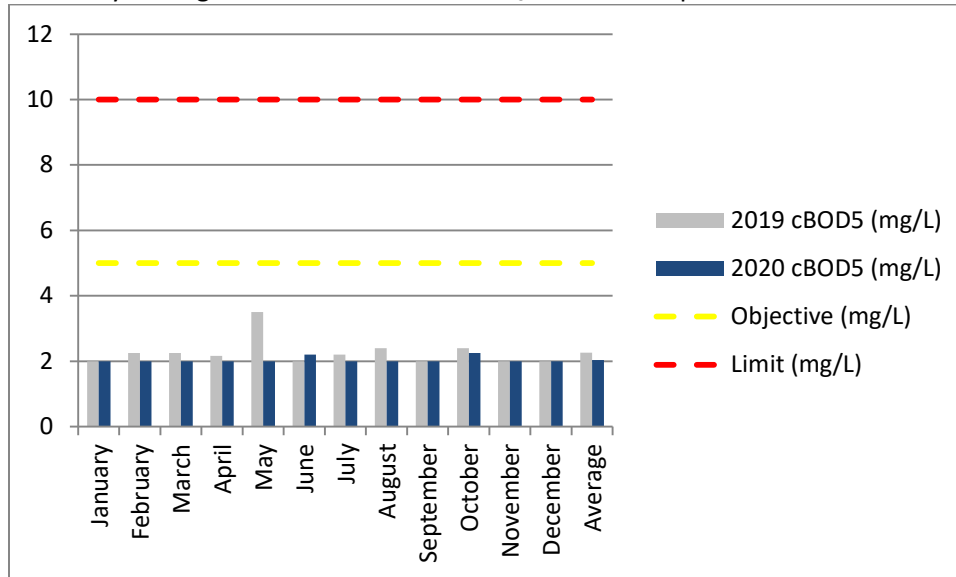
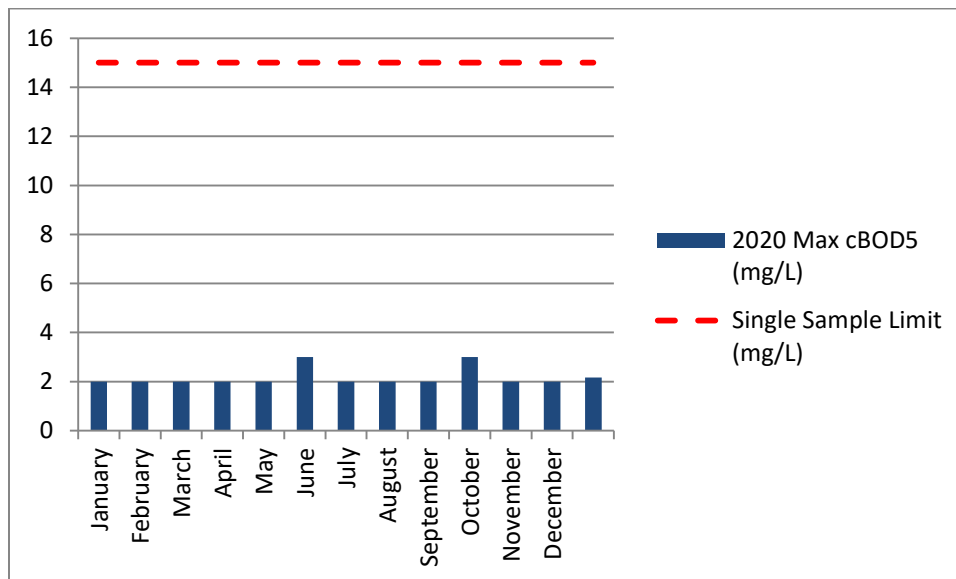


Chart 7. Maximum monthly concentrations of CBOD₅ in 2020 compared to the maximum single sample limit.



The annual average effluent Total Suspended Solids (TSS) concentration in 2020 was 4.5mg/L, which is an increased by 5.8% from 2019 (refer to Chart 8). The annual average effluent loading for TSS in 2020 was 0.42kg/day. The monthly average and single sample limits were met in 2020 with the exception of December for TSS. This non-compliance was reported to the MECP as per

the ECA requirements. Refer to Table 2 for monthly average concentration, single sample concentration, and loading limits.

Chart 8. Monthly average concentrations of TSS in 2020 compared to 2019.

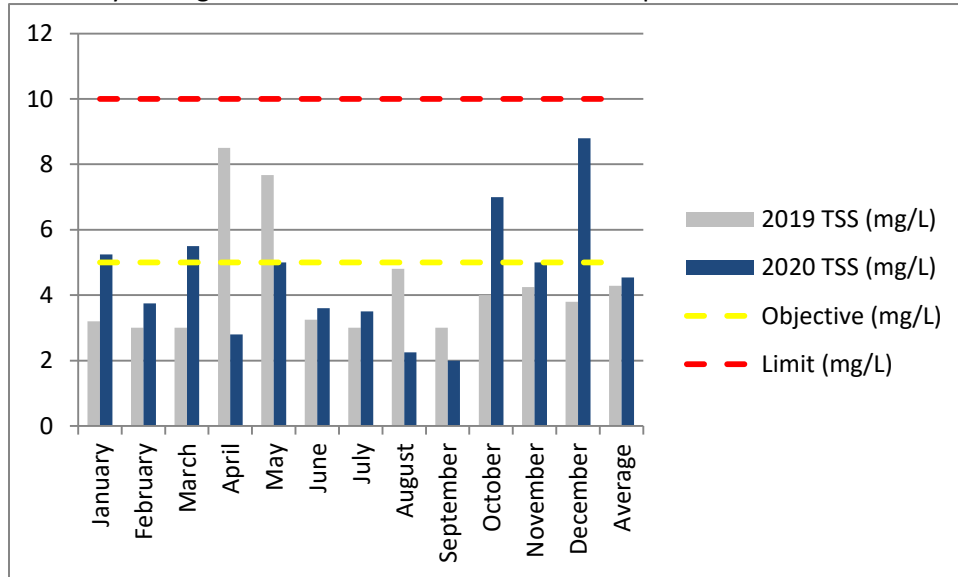
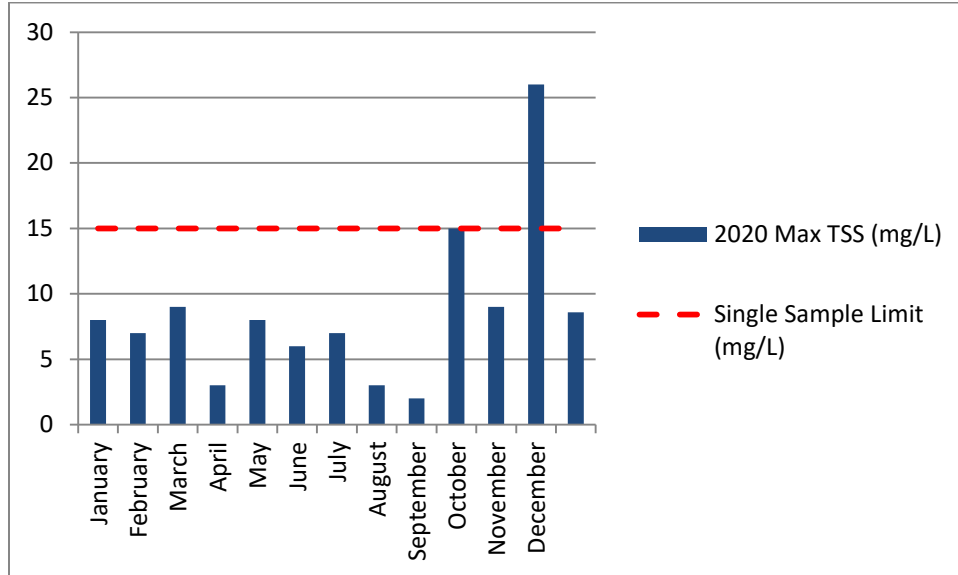


Chart 9. Maximum monthly concentrations of TSS in 2020 compared to the maximum single sample limit.



The annual average effluent Total Phosphorus (TP) concentration in 2020 was 0.37mg/L, which is an increase by 7.9% from 2019 (refer to Chart 10). The annual average effluent loading for TP in 2020 was 0.03kg/day. The monthly average and single sample limits were met in 2020 for TP with the exception of an average limit exceedance and single limit exceedance in September.

These non-compliances were reported to the MECP as per the ECA requirements. Refer to Table 2 for monthly average concentration, single sample concentration, and loading limits.

Chart 10. Monthly average concentrations of TP in 2020 compared to 2019.

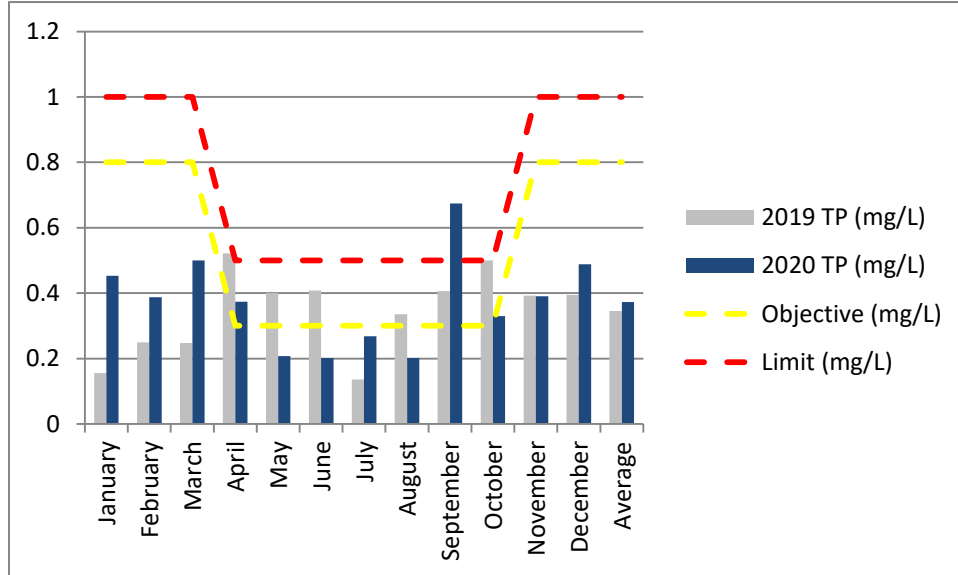
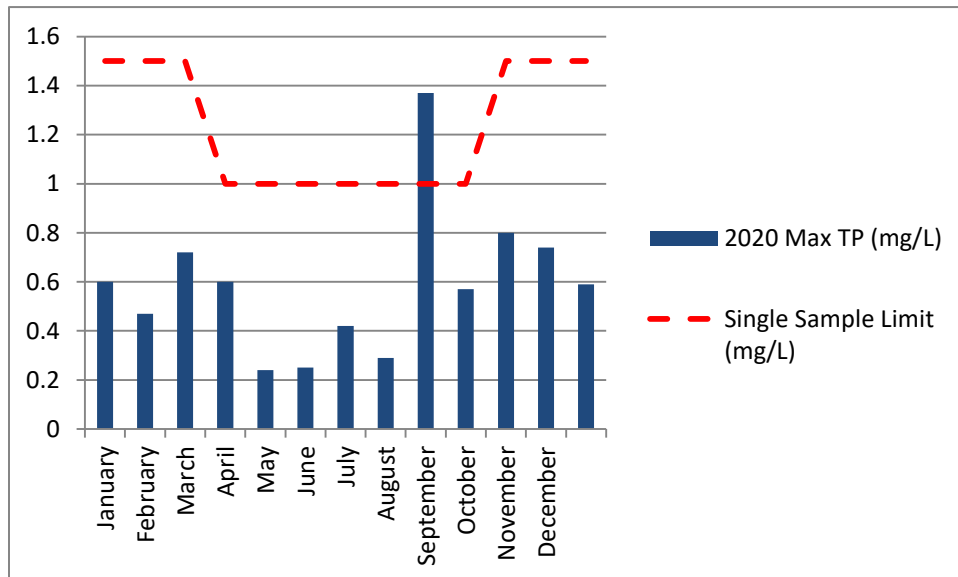


Chart 11. Maximum monthly concentrations of TP in 2020 compared to the maximum single sample limit.



The annual average effluent Total Ammonia + Ammonium Nitrogen (TAN) concentration in 2020 was 0.2mg/L, which is an decrease of 68% from 2019 (refer to Chart 12). The annual average effluent loading for TAN in 2020 was 0.02kg/day. The monthly average limits and single sample

limits were met in 2020 for TAN. Refer to Table 2 for monthly average concentration, single sample concentration, and loading limits.

Chart 12. Monthly average concentrations of TAN in 2020 compared to 2019.

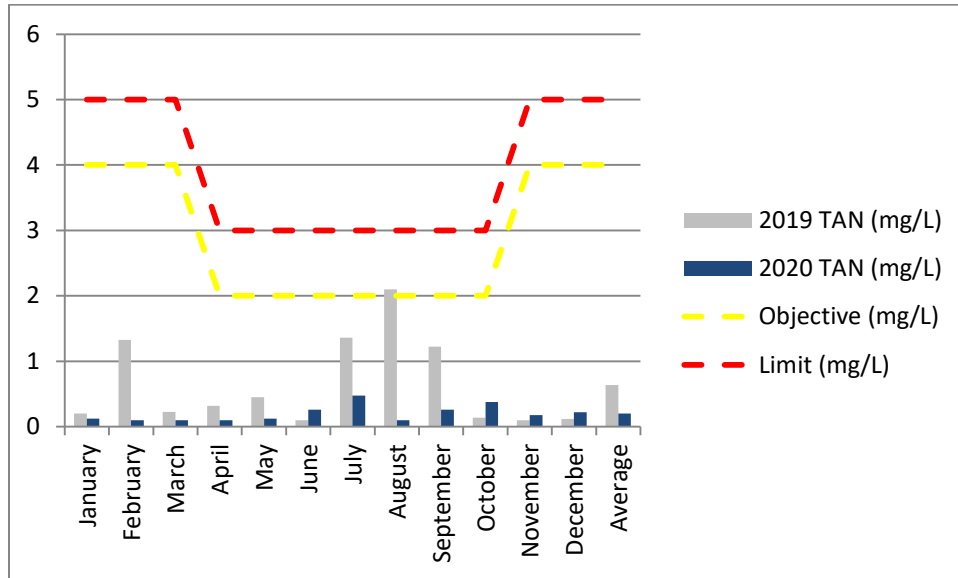
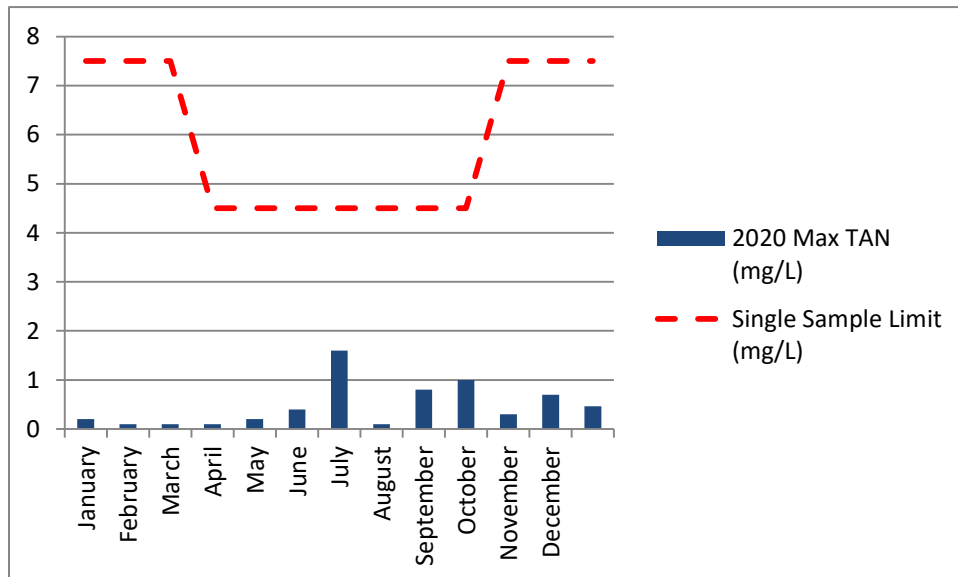


Chart 13. Maximum monthly concentrations of TAN in 2020 compared to the maximum single sample limit.

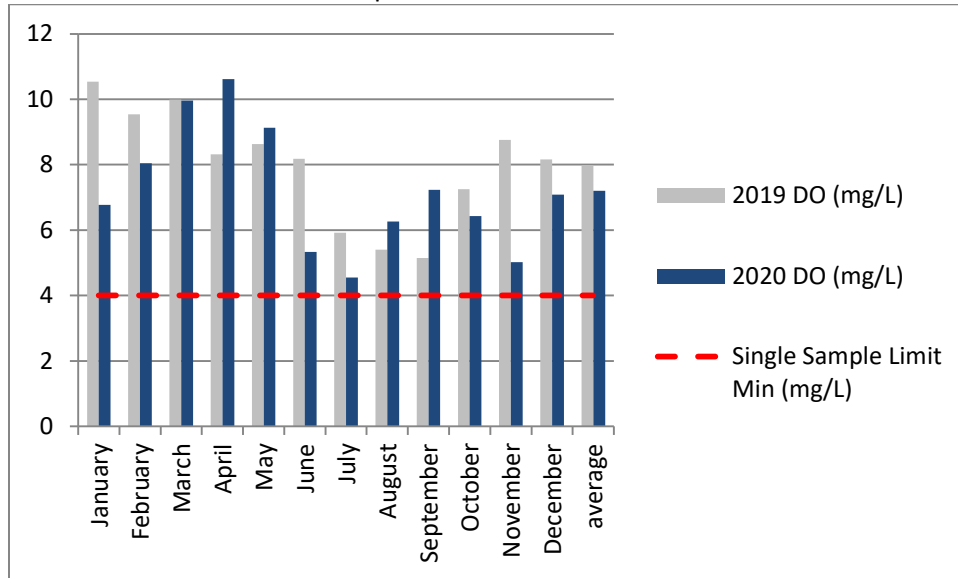


The annual average effluent pH in 2020 was 7.75, which is an increase by 5.5% from 2019. All pH readings were within the minimum and maximum limits identified in the ECA. Refer to

Table 2 for pH limits. Soda ash is added at the Wardsville WWTP to control alkalinity; the addition of soda ash also increases the pH.

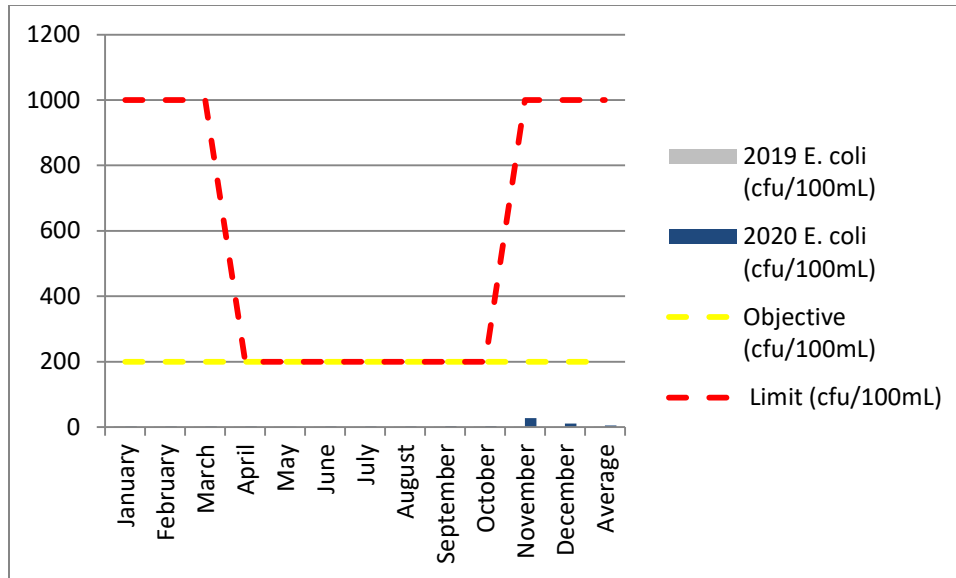
The annual average minimum effluent Dissolved Oxygen (DO) concentration in 2020 was 7.2mg/L, which is a decrease of 9.8% from 2019 (refer to Chart 14). DO limits were met in 2020. Refer to Table 2 for monthly minimum concentrations.

Chart 14. Monthly minimum concentrations of DO in 2020 compared to 2019. Dissolved oxygen is limit is a minimum concentration required.



The annual geometric mean effluent E. coli concentration in 2020 was 4.9cfu/100mL, which is an increase by 138% from 2019 (refer to Chart 16). The monthly geometric mean limits were met in 2020 for E. coli. Refer to Table 2 for monthly geometric mean concentration limits.

Chart 16. Monthly geometric mean concentrations of E. coli in 2020 compared to 2019.



Single Sample limits and the monthly average limit was exceeded in September for TP due possibly to the drop in aeration temperatures along with increased pH seen during the month. In December the TSS single sample limit was exceeded. In house TSS results were within limits but aeration MLSS were higher which may have contributed to the increased effluent TSS. All non-compliances were reported to the MECP.

Section 4: Monitoring Schedule

Refer to Appendix B for the monitoring schedule for 2021. All changes are documented on the sampling calendars that are signed off by the operator. Minor changes happened in April, June and July because of staff shortage.

Section 5: Operating Problems and Corrective Actions

In September the total phosphorus single limit along with the monthly average was exceeded. It was found that a temperature drop in the aeration tank may have caused issues with the coagulation process. Alum was increased correcting the issue.

In December the single limit was exceeded with TSS. In house testing was within compliance limits but aeration tanks solids were higher than normal possible causing solids carry over. Solids were brought down correcting the issue. Sample size aliquots were also increased to give more accurate in house testing results.

Section 6: Maintenance

Regular scheduled monthly preventative maintenance is assigned and monitored using the Workplace Management System (WMS) program. Refer to Appendix C for a schedule of work orders. The following is a summary of maintenance performed other than WMS work orders:

- New water well installed and plumbing
- Soda ash pump repairs
- Reject pump maintenance
- Replaced 2 blowers

Section 7: Effluent Quality Assurance

Effluent quality assurance is evaluated by monitoring parameters and changes throughout the plant processes. The operators monitor the aeration tank by performing weekly tests on the mixed liquor. These tests include DO, pH, temperature, settling tests, and Mixed Liquor Suspended Solids (MLSS). As well, monitoring of the alum dosages, wasting volumes and Return Activated Sludge Suspended Solids is completed. Data collected from these test provide information to the operator to make the appropriate adjustments in the treatment process and corrective actions can be taken before the plant reaches its effluent limits.

Section 8: Calibration and Maintenance

Annual maintenance on the generators was completed by Albert's Generator Service. Flow Metrix Technical Services Inc. performed the annual calibration on the flow meter in March. See Appendix D for the flow meter verification.

In house meters for pH are calibrated by OCWA operators as per manufacturer's instructions.

Section 9: Effluent Quality

Effluent Objectives

Detailed analytical data is provided in the excel spreadsheet in Appendix A. The following table summarizes the monthly average effluent concentrations for 2020.

Table 3. Monthly average effluent concentrations 2020 compared to the effluent objectives set out in the Environmental Compliance Approval.

Parameter	Effluent Objective (mg/L)	Effluent Results Ranges (mg/L)
cBOD5	5	<2 – 2.5
Suspended Solids	5	<2–8.8

Total Phosphorus	0.3(a)	0.20 – 0.67
	0.8(b)	0.39 – 0.50
Total (Ammonia + Ammonium) Nitrogen	2.0(a)	<0.1 – 0.475
	4.0(b)	<0.1 – 0.22
E. coli	200	1.68 – 27.54
pH	6.5-8.5	6.79 – 8.62

NOTE:

(a) limit applies during the non-freezing period April 1 to October 31

(b) limit applies during the freezing period November 1 to March 31

Discussion on Effluent Objectives

The Wardsville WWTP did not meet all the objectives in the Environmental Compliance Approval for 2020. There were 9 objective exceedances in 2020. The TP in September was a non-compliance in 2020. All actions taken are documented in the facility logbook.

Table 4. Exceedances of the Effluent Objectives identified in the Environmental Compliance Approval.

Parameter	Date	Result	Comment/Cause
TSS	January 2020	5.3	High Flows
TSS	March 2020	5.5	High Flows
TP	April 2020	0.37	High Flows
pH	May 15, 2020	8.62	Adjusting soda ash dosage
TP	September 2020	0.674	Temperature drop, adjusted alum dosage
TSS	October 2020	7	Adjusting alum dosage
TP	October 2020	0.33	Adjusting alum dosage
TSS	December 2020	8.8	Solids carry over

Section 10: Biosolids Management

Aerobically digested biosolids produced at the Wardsville WWTP are disposed of at the Glencoe Wastewater Treatment Plant. In 2020, there was approximately 109 m³ of sludge produced with no sludge removed from the Wardsville sludge holding tank. It is anticipated that in 2021, 50m³ of sludge will be removed from the holding tank, with approximately the 110m³ being produced.

Section 11: Community Complaints

April 2020: Homeowner at on Wellington St in Wardsville called with a sewer back up issue. Septic tank was found full and vacuum truck was called to empty. Later line was inspected with a camera and a blockage was found. Line was power flushed to remove blockage.

Section 12: Bypasses, Overflow, Spills, and Other Situations Outside Normal Operating Conditions

In 2020 there were no bypasses, spills or other situations outside normal operating conditions.

Section 13: Modifications to Sewage Works

In 2020 there were no modifications to the sewage works.

Section 14: Bypass/Overflow Elimination

In 2020 there were no bypasses/overflows.

Section 15: Proposed Works Completion and Commissioning

All the proposed works identified in ECA 6045-9DKP2X have been completed prior to 2020. There are no major modifications planned for 2021.

Section 16: Summary

The Wardsville Wastewater Treatment Plant provided effective treatment in 2020. In September there was a total phosphorus exceedance and in December there was a single sample limit total suspended solids exceedance.

APPENDIX A

Analytical Data

							January 2020 Winter		February 2020 Winter		March 2020 Winter		April 2020 Summer		May 2020 Summer		June 2020 Summer		July 2020 Summer		August 2020 Summer		September 2020 Summer		October 2020 Summer		November 2020 Winter		December 2020 Winter		Summary	Annual Loading														
		Objective Concentration (Summer)	Objective Concentration (Winter)	Limits (Summer)	Limits (winter)	Loading Limits	Results	Loading	Results	Loading	Results	Loading	Results	Loading	Results	Loading	Results	Loading	Results	Loading	Results	Loading	Results	Loading	Results	Loading	Results	Loading	Results	Loading																
Raw Flow (m3/d)	Avg	300		300			110.0		94.1		102.8		101.7		97.3		80.2		83.6		92.4		79.3		72.2		79.6		112.7		92.2															
	Max			1100			178.5		124.0		159.6		128.0		120.5		91.5		155.3		155.3		92.5		91.0		97.5		167.9		178.5															
	Min						68.0		77.0		87.0		76.0		81.0		72.5		62.5		73.0		60.5		55.5		65.0		93.0		55.5															
	Sum						3408.7		2728.6		3186.6		3052.0		3016.9		2405.9		2591.3		2865.1		2379.0		2237.1		2387.5		3492.1		33750.7															
Raw BOD5 (mg/L)	Avg	145				134.0	14.73	194	18.25	225	23.13	92	9.36	145	14.11	185	14.84	193	16.13	120	11.09	140	11.10	132	9.53	124	9.87	65	7.32	148.8	13.72															
Raw TSS (mg/L)	Avg	100				46.0	5.06	188	17.69	168	17.27	50	5.09	67	6.52	74	5.93	98	8.19	88	8.13	58	4.60	94	6.78	18	1.43	21	2.37	80.3	7.41															
Raw TKN (mg/L)	Avg	40				61	6.72	48	4.48	34.2	3.52	25.9	2.63	46	4.50	53	4.28	58	4.88	35	3.27	61	4.87	56	4.06	52.9	4.21	33	3.72	47.623	4.39															
Raw TP (mg/L)	Avg	8				7.1	0.78	7.35	0.69	3.14	0.32	3.45	0.35	6.25	0.61	6.815	0.55	12.10	1.01	4.90	0.45	7.09	0.56	7.47	0.54	6.53	0.52	3.4	0.38	6.34	0.58															
Effluent cBOD5 (mg/L)	Avg	5		10	3	<	2.0	0.22	<	2	0.19	<	2	0.20	<	2	0.19	<	2.2	0.18	<	2	0.17	<	2	0.18	<	2.25	0.16	<	2	0.23	<	2.038	0.19											
	Max			15		<	2.0	0.22	<	2	0.19	<	2	0.21	<	2	0.20	<	2	0.19	<	3	0.24	<	2	0.17	<	2	0.16	<	2	0.16	<	2	0.23	<	3	0.24								
	Min					<	2.0	0.22	<	2	0.19	<	2	0.21	<	2	0.20	<	2	0.19	<	2	0.17	<	2	0.18	<	2	0.16	<	2	0.14	<	2	0.23	<	2	0.14								
Effluent TSS (mg/L)	Avg	5		10	3	<	5.3	0.58	<	3.75	0.35	<	5.5	0.57	<	2.8	0.28	<	5	0.49	<	3.6	0.29	<	3.5	0.29	<	2.25	0.21	<	2	0.16	<	7	0.51	<	5.00	0.40	<	8.8	0.99	<	4.519	0.42		
	Max			15		<	8.0	0.88	<	7	0.66	<	9	0.93	<	3.00	0.31	<	8	0.78	<	6.00	0.48	<	7	0.59	<	3	0.28	<	2	0.16	<	15	1.08	<	9	0.72	<	26	2.93	<	26	2.93		
	Min					<	2.0	0.22	<	2	0.19	<	3	0.31	<	2	0.20	<	2	0.19	<	2	0.16	<	2	0.17	<	2	0.18	<	2	0.16	<	2	0.14	<	2	0.16	<	2	0.23	<	2	0.14		
Effluent TP (mg/L)	Avg	0.3	0.8	0.5	1.0	0.15 (0.30)	0.45	0.05	0.388	0.04	0.50	0.05	0.37	0.04	0.21	0.02	0.20	0.02	0.268	0.02	0.202	0.02	0.674	0.05	0.33	0.02	0.39	0.03	0.488	0.05	0.378	0.03														
	Max			1	1.5		0.60	0.07	0.47	0.04	0.72	0.07	0.60	0.06	0.24	0.02	0.25	0.02	0.42	0.04	0.29	0.03	1.37	0.11	0.57	0.04	0.8	0.06	0.74	0.08	1.37															
	Min						0.31	0.03	0.27	0.03	0.28	0.03	0.2	0.02	0.18	0.02	0.12	0.01	0.13	0.01	0.09	0.01	0.13	0.01	0.21	0.02	0.16	0.01	0.28	0.03	0.09															
Effluent TAN (mg/L)	Avg	2.0	4.0	3	5	0.9 (1.5)	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.125	0.01	<	0.26	0.02	<	0.475	0.04	<	0.1	0.01	<	0.26	0.02	<	0.375	0.03	<	0.175	0.01	<	0.22	0.02	<	0.202	0.02		
	Max			4.5	7.5		0.20	0.02	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.2	0.02	<	0.4	0.03	<	1.60	0.13	<	0.1	0.01	<	0.8	0.06	<	1	0.07	<	0.3	0.02	<	0.7	0.08	<	1.6			
	Min						0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1	0.10	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1	0.01	<	0.1
Effluent E. coli (cfu/100mL)	Geomean	200		200	1000		1.7		2		1.682		1.741		1.414		1.741		1.682		2		3.17		3.557		27.541		10.813		4.9															
	Max						<	2.0		<	2		<	2		<	2		<	2		<	2		20		2320		84		2320															
	Min						<	0.0		<	2		<	0		<	0		<	0		<	2		<	2		<	2		<	2		<	2		<	2		<	2		0			
Effluent DO (mg/L)	Avg						9.0		10.025		11.538		11.097		10.545		8.026		7.896		7.69		9.058		9.393		7.821		7.968		9.145															
	Max						12.2		12.15		12.4		11.73		11.46		9.79		8.8		8.77		9.7		9.94		10.35		8.88		12.4															
	Min			4	4		6.8		8.04		9.96		10.62		9.13		5.33		4.55		6.26		7.23		6.43		5.02		7.08		4.55															
Effluent pH	Avg						7.8		7.694		7.931		7.997		8.078		7.706		7.59		7.757		8.043		7.533		7.587		7.395		7.751															
	Max	8.5		9.5			8.0		8.02		8.43		8.17		8.62		8.29		8.07		8.15		8.31		8.17		8.01		7.91		8.62															
	Min	6.5		6			7.3		7.39		7.66		7.58		7.77		6.81		6.86		7.20		7.80		6.85		6.79		6.79		6.79															
Effluent Temp. (oC)	Avg						6.7		6.127		7.708		9.725		13.182		19.45		22.723		21.769		19.325		15.725		12.442		8.823		13.688															
	Max						7.8		7		9.5		11.7		18.6		21.5		24.6		23.7		22.2		19.6		14.6		11.3		24.6															
	Min						5.6		3.9		6.7		8.5		10.6		16.8		21.7		20.6		17.3		12.8		9.9		6.3		3.9															

APPENDIX B

Monitoring Schedule



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 1 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

January 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1 STAT	2
3	4 IH Full Raw, Effluent & Quarterly Samples	5	6 IH Reduced	7	8 IH Reduced	9
10	11 IH Full Effluent Samples	12	13 IH Reduced	14	15 IH Reduced	16
17	18 IH Full Effluent Samples	19	20 IH Reduced	21	22 IH Reduced	23
24	25 IH Full Effluent Samples	26	27 IH Reduced	28	29 IH Reduced	30
31						

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 2 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

February 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 IH Full Raw & Effluent Samples	2	3 IH Reduced	4	5 IH Reduced	6
7	8 IH Full Effluent Samples	9	10 IH Reduced	11	12 IH Reduced	13
14	15 STAT	16 IH Full Effluent Samples	17	18	19 IH Reduced	20
21	22 IH Full Effluent Samples	23	24 IH Reduced	25	26 IH Reduced	27
28						

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 3 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

March 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 IH Full Raw & Effluent Samples	2	3 IH Reduced	4	5 IH Reduced	6
7	8 IH Full Effluent Samples	9	10 IH Reduced	11	12 IH Reduced	13
14	15 IH Full Effluent Samples	16	17 IH Reduced	18	19 IH Reduced	20
21	22 IH Full Effluent Samples	23	24 IH Reduced	25	26 IH Reduced	27
28	29 IH Full Effluent Samples	30	31 IH Reduced			

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 4 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

April 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1 IH Reduced	2 STAT	3
4	5 STAT	6 IH Full Raw, Effluent & Quarterly Samples	7	8	9 IH Reduced	10
11	12 IH Full Effluent Samples	13	14 IH Reduced	15	16 IH Reduced	17
18	19 IH Full Effluent Samples	20	21 IH Reduced	22	23 IH Reduced	24
25	26 IH Full Effluent Samples	27	28 IH Reduced	29	30 IH Reduced	

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 5 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

May 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3 IH Full Raw & Effluent Samples	4	5 IH Reduced	6	7 IH Reduced	8
9	10 IH Full Effluent Samples	11	12 IH Reduced Annual H&S Walkthrough	13	14 IH Reduced	15
16	17 IH Full Effluent Samples	18	19 IH Reduced	20	21 IH Reduced	22
23	24 STAT	25 IH Full Effluent Samples	26	27	28 IH Reduced	29
30	31 IH Full Effluent Samples					

IH (In House) Full: Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced: Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples: 8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples: 8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples: Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 6 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

June 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2 IH Reduced	3	4 IH Reduced	5
6	7 IH Full Raw & Effluent Samples	8	9 IH Reduced	10	11 IH Reduced	12
13	14 IH Full Effluent Samples	15	16 IH Reduced	17	18 IH Reduced	19
20	21 IH Full Effluent Samples	22	23 IH Reduced	24	25 IH Reduced	26
27	28 IH Full Effluent Samples	29	30 IH Reduced			

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 7 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

July 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1 STAT	2 IH Reduced	3
4	5 IH Full Raw, Effluent & Quarterly Samples	6	7 IH Reduced	8	9 IH Reduced	10
11	12 IH Full Effluent Samples	13	14 IH Reduced	15	16 IH Reduced	17
18	19 IH Full Effluent Samples	20	21 IH Reduced	22	23 IH Reduced	24
25	26 IH Full Effluent Samples	27	28 IH Reduced	29	30 IH Reduced	31

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 8 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

August 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 STAT	3 IH Full Raw & Effluent Samples	4	5	6 IH Reduced	7
8	9 IH Full Effluent Samples	10	11 IH Reduced	12	13 IH Reduced	14
15	16 IH Full Effluent Samples	17	18 IH Reduced	19	20 IH Reduced	21
22	23 IH Full Effluent Samples	24	25 IH Reduced	26	27 IH Reduced	28
29	30 IH Full Effluent Samples	31				

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 9 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

September 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 IH Reduced	2	3 IH Reduced	4
5	6 STAT	7 IH Full Raw & Effluent Samples	8	9	10 IH Reduced	11
12	13 IH Full Effluent Samples	14	15 IH Reduced	16	17 IH Reduced	18
19	20 IH Full Effluent Samples	21	22 IH Reduced	23	24 IH Reduced	25
26	27 IH Full Effluent Samples	28	29 IH Reduced	30		

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 10 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

October 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1 IH Reduced	2
3	4 IH Full Raw, Effluent & Quarterly Samples	5	6 IH Reduced	7	8 IH Reduced	9
10	11 STAT	12 IH Full Effluent Samples	13	14	15 IH Reduced	16
17	18 IH Full Effluent Samples	19	20 IH Reduced	21	22 IH Reduced	23
24	25 IH Full Effluent Samples	26	27 IH Reduced	28	29 IH Reduced	30
31						

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 11 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

November 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 IH Full Raw & Effluent Samples	2	3 IH Reduced	4	5 IH Reduced	6
7	8 IH Full Effluent Samples	9	10 IH Reduced	11 STAT	12 IH Reduced	13
14	15 IH Full Effluent Samples	16	17 IH Reduced	18	19 IH Reduced	20
21	22 IH Full Effluent Samples	23	24 IH Reduced	25	26 IH Reduced	27
28	29 IH Full Effluent Samples	30				

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson



Sample Schedule 2021 6640 Wardsville WWTP

Issued: 2020-12-29
Rev.#: 0
Pages: 12 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

December 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 IH Reduced	2	3 IH Reduced	4
5	6 IH Full Raw & Effluent Samples	7	8 IH Reduced	9	10 IH Reduced	11
12	13 IH Full Effluent Samples	14	15 IH Reduced	16	17 IH Reduced	18
19	20 IH Full Effluent Samples	21	22 IH Reduced	23	24 IH Reduced	25
26	27 STAT	28 STAT	29 IH Full Effluent Samples	30	31 IH Reduced	

IH (In House) Full:

Raw 24hr Composite (pH, Alk)
Aeration (Set Test, MLSS, MLVSS, DO, pH, Temp.)
RAS (SS)
Lagoon Decant (TP, NH3+NH4, pH, DO)
Effluent 24hr Composite (pH, TP, NH3+NH4, Alk, SS); Grab (DO, Temp.)
Receiving Stream (pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TP, NH3+NH4)

Raw Samples:

8 hr Composite (BOD5, SS, TP, TKN)

Effluent Samples:

8 hr Composite (cBOD5, SS, TP, NH3+NH4, TKN, NO3, NO2, TP, Alkalinity, pH)
Grab (E. coli, DO, pH, Temp.)

Quarterly Samples:

Sludge holding tank Grab (Metals, SS, TP, NH3+NH4, NO3)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2020-12-29	0	Create Schedule	Terri-Lynn Thomson

APPENDIX C

Work Order Schedule

Workorder Summary Report

Report Start Date: Jan 1, 2020 12:00 AM

Report End Date: Dec 31, 2020 11:59 PM

Location: 6640*

Work Order Type: CAP,CORR,EMER,OPER,PM

Work Order Class:

WO #	Asset ID	Asset Description	Location Description	WorkOrder		PM Schedule		Workorder Details				
				Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish
2019212			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:34 PM	12/17/20 02:34 PM
1980852			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	11/2/20 12:00 AM	12/17/20 02:18 PM	12/17/20 02:18 PM
1938688			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	10/1/20 12:00 AM	12/17/20 02:03 PM	12/17/20 02:03 PM
1894427			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 08:06 AM	10/5/20 08:06 AM
1685209			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 08:34 AM	5/4/20 08:34 AM
1643055			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	3/1/20 12:00 AM	4/6/20 08:12 AM	4/6/20 08:12 AM
1604366			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 08:00 AM	3/2/20 08:00 AM
1560547			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	1/1/20 12:00 AM	1/30/20 03:15 PM	1/30/20 03:15 PM
1854297			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	8/1/20 12:00 AM	8/27/20 01:51 PM	8/27/20 01:51 PM
1813331			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	7/1/20 12:00 AM	7/23/20 01:41 PM	7/23/20 01:41 PM
1770269			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	6/1/20 12:00 AM	7/7/20 07:30 AM	7/7/20 07:30 AM
1728719			6640, Wardsville WWT P	PM	Health and Safety	1	MONTHS	OHSA Inspection Wardsville (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:51 AM	5/25/20 08:51 AM
1775417			6640, Wardsville WWT P	PM	Compliance	2	YEARS	Facility Operation SOP Manual Review & Updates (2y) - 6640	CLOSE	6/1/20 12:00 AM	12/7/20 11:34 AM	12/7/20 11:34 AM
2018946			6640, Wardsville WWT P	PM	Compliance	1	YEARS	FEP Contact List Review Wardsville WWTP (1y) - 6640	COMP	12/1/20 12:00 AM	1/21/21 11:50 AM	1/21/21 11:50 AM
1985517			6640, Wardsville WWT P	PM	Compliance	1	YEARS	FEP Review Wardsville (1y) - 6640	COMP	11/2/20 12:00 AM	12/29/20 11:13 AM	12/29/20 11:13 AM
1979746	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	11/2/20 12:00 AM	12/17/20 02:08 PM	12/17/20 02:08 PM
1979483			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	11/2/20 12:00 AM	11/18/20 02:26 PM	11/18/20 02:26 PM
1979725	0000209459	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	11/2/20 12:00 AM	12/17/20 02:04 PM	12/17/20 02:04 PM
1979739	0000209460	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	11/2/20 12:00 AM	12/17/20 02:05 PM	12/17/20 02:05 PM
1937551	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	10/1/20 12:00 AM	10/20/20 02:32 PM	10/20/20 02:32 PM

1937558	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	10/1/20 12:00 AM	10/20/20 02:30 PM	10/20/20 02:30 PM
2018893			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:31 PM	12/17/20 02:31 PM
2017279			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:21 PM	12/17/20 02:21 PM
2017545	0000209459	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:22 PM	12/17/20 02:22 PM
2017559	0000209460	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:23 PM	12/17/20 02:23 PM
2017566	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:24 PM	12/17/20 02:24 PM
1894087			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 08:05 AM	10/5/20 08:05 AM
1980565			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	11/2/20 12:00 AM	12/17/20 02:12 PM	12/17/20 02:12 PM
1938384			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	10/1/20 12:00 AM	10/20/20 02:28 PM	10/20/20 02:28 PM
1937295			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	10/1/20 12:00 AM	10/20/20 02:24 PM	10/20/20 02:24 PM
1937537	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	10/1/20 12:00 AM	10/20/20 02:25 PM	10/20/20 02:25 PM
1893139	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 07:59 AM	10/5/20 07:59 AM
1893153	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 08:00 AM	10/5/20 08:00 AM
1893160	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 08:01 AM	10/5/20 08:01 AM
1684911			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 08:36 AM	5/4/20 08:36 AM
1892867			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 07:58 AM	10/5/20 07:58 AM
1683793			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 07:52 AM	5/4/20 07:52 AM
1684035	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 07:54 AM	5/4/20 07:54 AM
1684049	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 07:55 AM	5/4/20 07:55 AM
1684056	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 08:22 AM	5/4/20 08:22 AM
1811915			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	7/1/20 12:00 AM	8/4/20 08:40 AM	8/4/20 08:40 AM
1812157	0000209459	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	7/1/20 12:00 AM	8/4/20 08:32 AM	8/4/20 08:32 AM
1768917	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	6/1/20 12:00 AM	6/22/20 12:00 PM	6/22/20 12:00 PM
1768924	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	6/1/20 12:00 AM	6/22/20 12:02 PM	6/22/20 12:02 PM
1853999			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	8/1/20 12:00 AM	8/28/20 02:36 PM	8/28/20 02:36 PM
1813033			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	7/1/20 12:00 AM	7/23/20 01:43 PM	7/23/20 01:43 PM

1642720			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	3/1/20 12:00 AM	3/30/20 09:12 AM	3/30/20 09:12 AM
1559965			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	1/1/20 12:00 AM	2/3/20 07:58 AM	2/3/20 07:58 AM
1852937			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	8/1/20 12:00 AM	8/27/20 02:07 PM	8/27/20 02:07 PM
1853179	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	8/1/20 12:00 AM	8/27/20 01:54 PM	8/27/20 01:54 PM
1812171	0000209460	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	7/1/20 12:00 AM	8/4/20 08:31 AM	8/4/20 08:31 AM
1812178	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	7/1/20 12:00 AM	8/4/20 08:30 AM	8/4/20 08:30 AM
1605101	0000123165	TANK STORAGE ALUM	6640, Wardsville WWT P	PM	Inspection	1	YEARS	Tank Storage Alum Insp/Service (1y) - 6640	CLOSE	2/1/20 12:00 AM	4/6/20 08:16 AM	4/6/20 08:16 AM
1641453			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	3/1/20 12:00 AM	4/6/20 08:15 AM	4/6/20 08:15 AM
1641719	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	3/1/20 12:00 AM	3/30/20 09:07 AM	3/30/20 09:07 AM
1641733	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	3/1/20 12:00 AM	3/30/20 09:08 AM	3/30/20 09:08 AM
1641740	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	3/1/20 12:00 AM	3/30/20 09:09 AM	3/30/20 09:09 AM
1604068			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 08:03 AM	3/2/20 08:03 AM
1605089	0000123164	TANK ALUM DAY	6640, Wardsville WWT P	PM	Inspection	1	YEARS	Tank Alum Day Insp/Service (1y) - 6640	CLOSE	2/1/20 12:00 AM	4/6/20 08:20 AM	4/6/20 08:20 AM
1605095	0000123166	TANK STORAGE / MIXING SODA ASH	6640, Wardsville WWT P	PM	Inspection	1	YEARS	Tank Storage / Mixing Soda Ash Insp/Service (1y) - 6640	CLOSE	2/1/20 12:00 AM	4/6/20 08:18 AM	4/6/20 08:18 AM
1603208	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 07:54 AM	3/2/20 07:54 AM
1603215	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 07:57 AM	3/2/20 07:57 AM
1602952			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 07:48 AM	3/2/20 07:48 AM
1603194	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 07:51 AM	3/2/20 07:51 AM
1559045	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	1/1/20 12:00 AM	2/3/20 07:47 AM	2/3/20 07:47 AM
1559052	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	1/1/20 12:00 AM	2/3/20 07:49 AM	2/3/20 07:49 AM
1558773			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	1/1/20 12:00 AM	2/3/20 07:42 AM	2/3/20 07:42 AM
1559031	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	1/1/20 12:00 AM	2/3/20 07:44 AM	2/3/20 07:44 AM
1853193	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	8/1/20 12:00 AM	8/27/20 01:56 PM	8/27/20 01:56 PM
1853200	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	8/1/20 12:00 AM	8/27/20 02:02 PM	8/27/20 02:02 PM

1768623			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	6/1/20 12:00 AM	6/22/20 11:57 AM	6/22/20 11:57 AM
1768903	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	6/1/20 12:00 AM	6/22/20 11:59 AM	6/22/20 11:59 AM
1727581	0000209491	PANEL ALARM/DIALER	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:27 AM	5/25/20 08:27 AM
1728410			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:53 AM	5/25/20 08:53 AM
1727318			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Blower Pos Disp Insp Route (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:08 AM	5/25/20 08:08 AM
1727560	0000209459	PANEL ALARM/DIALER KENNEDY PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:10 AM	5/25/20 08:10 AM
1727574	0000209460	PANEL ALARM/DIALER COURSE PS	6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:25 AM	5/25/20 08:25 AM
1769937			6640, Wardsville WWT P	PM	Inspection	1	MONTHS	Building & Grounds Maintenance (1m) - 6640	CLOSE	6/1/20 12:00 AM	7/7/20 07:29 AM	7/7/20 07:29 AM
1750483			6640, Wardsville WWT P	CAP	Predictive Maintenance	0		Wardsville WWTP 6640 - Filter reject tank cleaning & repairs	CLOSE		5/15/20 03:07 PM	5/15/20 03:07 PM
1751719			6640, Wardsville WWT P	CORR	Refurbish/Replace/Repair	0		Wardsville WWTP- East aeration reseeding	CLOSE		10/19/20 10:47 AM	10/19/20 10:47 AM
1793990			6640, Wardsville WWT P	CAP	Refurbish/Replace/Repair	0		Wardsville PS - Golf course & Kennedy rd Alarm dialer replacements	CLOSE		10/19/20 10:52 AM	10/19/20 10:52 AM
1833031			6640, Wardsville WWT P	CORR	Refurbish/Replace/Repair	0		Queen St - Sewer main back up	CLOSE		7/7/20 11:37 AM	7/7/20 11:37 AM
2018445	0000123646	GENERATOR 01 ELECTRIC WARD	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:28 PM	12/17/20 02:28 PM
2018812	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:32 PM	12/17/20 02:32 PM
1707133			Wardsville Wastewater Collection and Treatment System	CORR	Refurbish/Replace/Repair	0		130 Wellington St, Septic Tank Inspection (6640)	CLOSE		4/6/20 09:09 AM	4/6/20 09:09 AM
1664917			6640, Wardsville Sewage Pumping Stn 1	CORR	Refurbish/Replace/Repair	0		Wardsville Main PS - Tank lid replacements	CLOSE		3/30/20 10:38 AM	3/30/20 10:38 AM
1874082			6640, Wardsville WWT P	CAP	Refurbish/Replace/Repair	0		Blower Replacement Project-6640	CLOSE		10/19/20 11:20 AM	10/19/20 11:20 AM
1961720			6640, Wardsville WWT P	CAP	Refurbish/Replace/Repair	0		Filter Reject Pit Restoration-6640	COMP		1/11/21 09:49 AM	1/11/21 09:49 AM
2018439	0000063097	GENERATOR 02 ELECTRIC	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:26 PM	12/17/20 02:26 PM
2018442	0000063098	GENERATOR 03 ELECTRIC	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	12/1/20 12:00 AM	12/17/20 02:27 PM	12/17/20 02:27 PM
2037741	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	12/10/20 12:00 AM	12/17/20 02:29 PM	12/17/20 02:29 PM
1938218	0000063097	GENERATOR 02 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	10/1/20 12:00 AM	11/18/20 02:09 PM	11/18/20 02:09 PM
1938221	0000063098	GENERATOR 03 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	10/1/20 12:00 AM	11/18/20 02:10 PM	11/18/20 02:10 PM
1938224	0000123646	GENERATOR 01 ELECTRIC WARD PS1	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	10/1/20 12:00 AM	11/18/20 02:12 PM	11/18/20 02:12 PM
1938341	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	10/1/20 12:00 AM	10/20/20 02:29 PM	10/20/20 02:29 PM
1894044	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Replace/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 08:04 AM	10/5/20 08:04 AM

1980399	0000063097	GENERATOR 02 ELECTRIC	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	11/2/20 12:00 AM	12/17/20 02:09 PM	12/17/20 02:09 PM
1980402	0000063098	GENERATOR 03 ELECTRIC	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	11/2/20 12:00 AM	12/17/20 02:10 PM	12/17/20 02:10 PM
1980405	0000123646	GENERATOR 01 ELECTRIC WARD	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	11/2/20 12:00 AM	12/17/20 02:11 PM	12/17/20 02:11 PM
1980522	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	11/2/20 12:00 AM	11/18/20 02:05 PM	11/18/20 02:05 PM
1985742	0000123654	BLOWER POSITIVE DISPLACEMENT 03	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Blower Positive Displacement 03 Insp/Service (1y) - 6640	CLOSE	11/2/20 12:00 AM	11/18/20 02:17 PM	11/18/20 02:17 PM
1985750	0000209486	BLOWER POSITIVE DISPLACEMENT 02	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Blower Positive Displacement 02 Insp/Service (1y) - 6640	CLOSE	11/2/20 12:00 AM	11/18/20 02:19 PM	11/18/20 02:19 PM
1985758	0000209487	BLOWER POSITIVE DISPLACEMENT 01	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Blower Positive Displacement 01 Insp/Service (1y) - 6640	CLOSE	11/2/20 12:00 AM	11/18/20 02:24 PM	11/18/20 02:24 PM
1998704	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	11/10/20 12:00 AM	12/17/20 02:18 PM	12/17/20 02:18 PM
1684745	0000063097	GENERATOR 02 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 08:24 AM	5/4/20 08:24 AM
1642531	0000063097	GENERATOR 02 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	3/1/20 12:00 AM	3/23/20 07:54 AM	3/23/20 07:54 AM
1642534	0000063098	GENERATOR 03 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	3/1/20 12:00 AM	3/23/20 08:04 AM	3/23/20 08:04 AM
1642537	0000123646	GENERATOR 01 ELECTRIC WARD PS1	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	3/1/20 12:00 AM	3/23/20 08:02 AM	3/23/20 08:02 AM
1642677	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	3/1/20 12:00 AM	3/30/20 09:10 AM	3/30/20 09:10 AM
1684748	0000063098	GENERATOR 03 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 08:26 AM	5/4/20 08:26 AM
1684751	0000123646	GENERATOR 01 ELECTRIC WARD PS1	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 08:29 AM	5/4/20 08:29 AM
1684868	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	4/1/20 12:00 AM	5/4/20 08:33 AM	5/4/20 08:33 AM
1707585	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	4/10/20 12:00 AM	5/4/20 08:51 AM	5/4/20 08:51 AM
1689754	0000209439	PUMP PERISTALTIC 01 ALUM	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Pump Peristaltic 01 Alum Insp/Service (1y) - 6640	CLOSE	4/1/20 12:00 AM	7/22/20 12:21 PM	7/22/20 12:21 PM
1662636	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	3/10/20 12:00 AM	4/6/20 08:11 AM	4/6/20 08:11 AM
1893898	0000063097	GENERATOR 02 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 08:02 AM	10/5/20 08:02 AM
1893901	0000063098	GENERATOR 03 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 08:03 AM	10/5/20 08:03 AM
1893904	0000123646	GENERATOR 01 ELECTRIC WARD PS1	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	9/1/20 12:00 AM	10/5/20 08:03 AM	10/5/20 08:03 AM
1689771	0000209440	PUMP PERISTALTIC 02 ALUM	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Pump Peristaltic 02 Alum Insp/Service (1y) - 6640	CLOSE	4/1/20 12:00 AM	7/22/20 12:21 PM	7/22/20 12:21 PM
1689788	0000123176	BLOWER POSITIVE DISPLACEMENT A4	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Blower A4 Insp/Service (1y) - 6640	CLOSE	4/1/20 12:00 AM	7/22/20 12:21 PM	7/22/20 12:21 PM
1689796	0000123178	BLOWER POSITIVE DISPLACEMENT A5	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Blower A5 Insp/Service (1y) - 6640	CLOSE	4/1/20 12:00 AM	7/22/20 12:21 PM	7/22/20 12:21 PM
1960812	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	10/10/20 12:00 AM	11/18/20 02:14 PM	11/18/20 02:14 PM
1916541	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	9/10/20 12:00 AM	10/5/20 08:07 AM	10/5/20 08:07 AM

1853833	000063097	GENERATOR 02 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	8/1/20 12:00 AM	10/5/20 07:54 AM	10/5/20 07:54 AM
1853836	000063098	GENERATOR 03 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	8/1/20 12:00 AM	10/5/20 07:55 AM	10/5/20 07:55 AM
1853839	0000123646	GENERATOR 01 ELECTRIC WARD PS1	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	8/1/20 12:00 AM	10/5/20 07:56 AM	10/5/20 07:56 AM
1853956	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	8/1/20 12:00 AM	8/27/20 01:39 PM	8/27/20 01:39 PM
1559789	000063097	GENERATOR 02 ELECTRIC PORTABLE WARD/SWM	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	1/1/20 12:00 AM	2/3/20 07:53 AM	2/3/20 07:53 AM
1559792	000063098	GENERATOR 03 ELECTRIC PORTABLE WARD/SWM	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	1/1/20 12:00 AM	2/3/20 07:51 AM	2/3/20 07:51 AM
1559795	0000123646	GENERATOR 01 ELECTRIC WARD PS1	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	1/1/20 12:00 AM	1/27/20 02:55 PM	1/27/20 02:55 PM
1559922	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	1/1/20 12:00 AM	1/30/20 09:43 AM	1/30/20 09:43 AM
1603902	000063097	GENERATOR 02 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 08:40 AM	3/2/20 08:40 AM
1603905	000063098	GENERATOR 03 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 08:39 AM	3/2/20 08:39 AM
1603908	0000123646	GENERATOR 01 ELECTRIC WARD PS1	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 08:14 AM	3/2/20 08:14 AM
1604025	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	2/1/20 12:00 AM	3/2/20 08:05 AM	3/2/20 08:05 AM
1622671	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	2/10/20 12:00 AM	3/2/20 07:36 AM	3/2/20 07:36 AM
1604921			6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Pump Diaphragm Insp/Service Route (1y) - 6640	CLOSE	2/1/20 12:00 AM	4/6/20 08:22 AM	4/6/20 08:22 AM
1605032	0000123167	MIXER SODA ASH	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Mixer Soda Ash Insp/Service (1y) - 6640	CLOSE	2/1/20 12:00 AM	4/6/20 08:21 AM	4/6/20 08:21 AM
1812867	000063097	GENERATOR 02 ELECTRIC	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	7/1/20 12:00 AM	8/4/20 08:30 AM	8/4/20 08:30 AM
1812870	000063098	GENERATOR 03 ELECTRIC PORTABLE	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	7/1/20 12:00 AM	7/23/20 01:37 PM	7/23/20 01:37 PM
1812873	0000123646	GENERATOR 01 ELECTRIC WARD PS1	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	7/1/20 12:00 AM	7/23/20 01:39 PM	7/23/20 01:39 PM
1812990	0000209481	UV LIGHT	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	UV Light Insp (1m) - 6640	CLOSE	7/1/20 12:00 AM	7/23/20 01:40 PM	7/23/20 01:40 PM
1561180	0000209493	SAMPLER FINAL EFFLUENT	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Sampler Final Effluent Insp/Service (1y) - 6640	CLOSE	1/1/20 12:00 AM	4/30/20 10:32 AM	4/30/20 10:32 AM
1584847	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	1/10/20 12:00 AM	1/30/20 09:32 AM	1/30/20 09:32 AM
1859633	0000123655	COMPRESSOR AIR 01/02	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	YEARS	Compressor Air 01/02 Insp/Service (1y) - 6640	CLOSE	8/1/20 12:00 AM	11/18/20 02:06 PM	11/18/20 02:06 PM
1872847	0000209425	GENERATOR Standby	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Test/Insp (1m,1y) 6640	CLOSE	8/10/20 12:00 AM	10/5/20 07:57 AM	10/5/20 07:57 AM
1769706	000063097	GENERATOR 02 ELECTRIC	6640, Wardsville WWT P	PM	Refurbish/Repla ce/Repair	1	MONTHS	Generator Electric Test/Insp (1m) - 6640	CLOSE	6/1/20 12:00 AM	6/22/20 12:03 PM	6/22/20 12:03 PM

		ELECTRIC PORTABLE GENERATOR 03	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Electric Test/Insp (1m) - 6640	CLOSE	6/1/20 12:00 AM	7/22/20 12:34 PM	7/22/20 12:34 PM
1769709	0000063098	ELECTRIC GENERATOR 01	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Electric Test/Insp (1m) - 6640	CLOSE	6/1/20 12:00 AM	7/22/20 12:34 PM	7/22/20 12:34 PM
1769712	0000123646	ELECTRIC WARD	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Electric Test/Insp (1m) - 6640	CLOSE	6/1/20 12:00 AM	7/22/20 12:34 PM	7/22/20 12:34 PM
1769873	0000209481	UV LIGHT	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	UV Light Insp (1m) - 6640	CLOSE	6/1/20 12:00 AM	7/22/20 12:35 PM	7/22/20 12:35 PM
1792131	0000209425	GENERATOR Standby	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Test/Insp (1m,1y) 6640	CLOSE	6/10/20 12:00 AM	7/22/20 12:38 PM	7/22/20 12:38 PM
1818460	0000123646	GENERATOR 01	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	YEARS	6640	Generator 01 Electric Ward Ps1 Insp/Service (1y) - 6640	CLOSE	7/1/20 12:00 AM	10/19/20 12:40 PM	10/19/20 12:40 PM
1833569	0000209425	GENERATOR Standby	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Test/Insp (1m,1y) 6640	CLOSE	7/10/20 12:00 AM	7/27/20 07:28 AM	7/27/20 07:28 AM
1733290	0000123173	FAN EXHAUST CHEMICAL BUILDING	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	YEARS	6640	Fan Exhaust Insp/Service (1y) - 6640	CLOSE	5/1/20 12:00 AM	7/22/20 12:30 PM	7/22/20 12:30 PM
1733297	0000123175	FAN EXHAUST 01 BLOWERE RM	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	YEARS	6640	Fan Exhaust Insp/Service (1y) - 6640	CLOSE	5/1/20 12:00 AM	7/22/20 12:30 PM	7/22/20 12:30 PM
1749718	0000209425	GENERATOR Standby	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Test/Insp (1m,1y) 6640	CLOSE	5/10/20 12:00 AM	5/25/20 08:54 AM	5/25/20 08:54 AM
1917565				6640, Wardsville WWT	CAP	Refurbish/Replacement/Repair	0		6640	1868 Longwoods rd , Wardsville - Sewer tie in	CLOSE		9/17/20 10:29 AM	9/17/20 10:29 AM
1707849				6640, Wardsville WWT	CORR	Refurbish/Replacement/Repair	0		6640	229 William St, Septic tank Inspection (6640)	CLOSE		4/14/20 07:50 AM	4/14/20 07:50 AM
1728244	0000063097	GENERATOR 02	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Electric Test/Insp (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:28 AM	5/25/20 08:28 AM
1728247	0000063098	GENERATOR 03	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Electric Test/Insp (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:30 AM	5/25/20 08:30 AM
1728250	0000123646	GENERATOR 01	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	Generator Electric Test/Insp (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:32 AM	5/25/20 08:32 AM
1728367	0000209481	UV LIGHT	P	6640, Wardsville WWT	PM	Refurbish/Replacement/Repair	1	MONTHS	6640	UV Light Insp (1m) - 6640	CLOSE	5/1/20 12:00 AM	5/25/20 08:48 AM	5/25/20 08:48 AM
1689804	0000123647	METER FLOW	P	6640, Wardsville WWT	PM	Calibration	1	YEARS	6640	Meter Flow Insp/Service (1y) - 6640	CLOSE	4/1/20 12:00 AM	5/25/20 08:06 AM	5/25/20 08:06 AM
1832433				Wardsville Wastewater Collection and Treatment System	CORR	Community Complaint	0		6640	207 Church st - Septic tank inspection	CLOSE		7/3/20 07:48 AM	7/3/20 07:48 AM
1834313				6640, Wardsville WWT	CAP	Community Complaint	0		6640	Sewer back up - 229 William street	CLOSE		10/19/20 10:55 AM	10/19/20 10:55 AM

APPENDIX D

Flow Meter Verification



AS FOUND CERTIFICATION
FORWARD FLOW DIRECTION
PASS

CLIENT DETAIL

CUSTOMER OCWA - West Elgin Middlesex
CONTACT Cindy Sigurdson
Compliance Manager
9210 Graham Road, West Lorne
c: 226-377-3563
e: csigurdson@ocwa.com

[MUT] MANUFACTURER Krohne
MODEL IFC010D
SERIAL NUMBER 02116607
FUSE On Board Plug

PLANT ID Wardsville WWTP
METER ID Influent Flow Meter
FIT ID N/A
CLIENT TAG OCWA# 123647
OTHER ORG# 6640
GPS COORDINATES N42 39.004 W081 45.537

EQUIPMENT DETAIL

VER. BY - FM Paris Machuk / Parth Patel

Quality Management Standards Information -
Reference equipment and instrumentation used to
conduct this verification test is found in our AC-
QMS document at the time this test was

VERIFICATION DATE March 17, 2020
CAL. FREQUENCY Annual
CAL. DUE DATE March, 2021

PROGRAMMING PARAMETERS

DIAMETER (DN) mm 100
F.S. FLOW - MAG LPS 66.4
F.S. RANGE - O/P LPS 78.5
CAL. k-FACTOR GKL 5.54870

FORWARD TOTALIZER INFORMATION

AS FOUND 424807 M3
AS LEFT 424819 M3
DIFFERENCE 12 M3

TEST CRITERIA

AS FOUND CERTIFICATION TEST Yes
FORWARD FLOW DIRECTION Yes
ALLOWABLE [%] ERROR 5

COMPONENTS TESTED

CONVERTER DISPLAY Yes
mA OUTPUT Yes
TOTALIZER Yes
ACCURACY BASED ON [% o.r.] Yes
ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.

Zero Offset Flow LPS 0.09

FLOW TUBE SIMULATION

		0.0	1.0	2.0	5.0	10.0	m/s	
		0.1	10.1	20.1	50.1	100.1	% F.S. Flow	
		0.1	8.6	17.0	42.4	84.7	% F.S. Range	
REF. FLOW RATE		0.09	6.73	13.37	33.30	66.50	LPS	
MUT [Reading]		0.09	6.70	13.35	33.28	66.49	LPS	
MUT [Difference]		0.00	-0.03	-0.02	-0.02	-0.01	LPS	
MUT [% Error]		0.00	-0.47	-0.17	-0.05	-0.02	%	
mA OUTPUT		4.000	5.371	6.724	10.783	17.548	mA	
MUT [Reading]	min. 4.000 mA	3.999	5.363	6.720	10.778	17.536	mA	
MUT [Difference]	max. 20.000 mA	-0.001	-0.008	-0.004	-0.005	-0.012	mA	
MUT [% Error]		-0.02	-0.15	-0.06	-0.05	-0.07	%	
TOTALIZER - REF. FLOW RATE							66.505	LPS
TOTALIZER [MUT]							7	M3
TEST TIME							105.34	SECONDS
CALC. TOTALIZER							7.006	M3
ERROR							-0.08	%

COMMENTS

Note: mA output tested but not used

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	KRO	1
PROCESS METER	DMM	11
ANALOG METER	AM	N/A
STOP WATCH	SW	YES

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	-0.18	PASS
mA OUTPUT	-0.07	PASS
TOTALIZER	-0.08	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.