Petawawa Drinking Water System

Waterworks # 210002101 System Category – Large Municipal Residential

Annual Water Report

Prepared For: Town of Petawawa

Reporting Period of January 1st – December 31st, 2019

Issued: Feb. 27th, 2020

Revision: 0

Operating Authority:



This report has been prepared to satisfy the annual reporting requirements in O. Reg. 170/03, Section 11 and Schedule 22

Table of Contents

Annual Water Report	1
Report Availability	1
Compliance Report Card	1
System Process Description	1
Raw Source	1
Treatment	1
Treatment Chemicals used during the reporting year:	2
Distribution	2
Summary of Non-Compliance	2
Adverse Water Quality Incidents	2
Non-Compliance	2
Non-Compliance Identified in a Ministry Inspection:	3
Flows	4
Raw Water Flows	4
Total Monthly Flows (m3/d)	4
Monthly Rated Flows (L/s)	4
Treated Water Flows	5
Monthly Rated Flows	5
Annual Total Flow Comparison	5
Regulatory Sample Results Summary	6
Microbiological Testing	6
Operational Testing	6
Inorganic Parameters	6
Schedule 15 Sampling:	7
Organic Parameters	7
Additional Legislated Samples	9
Major Maintenance Summary	9
Distribution Maintenance	10
WTRS Data and Submission Confirmation	A

Report Availability

This system serves more than 10,000 residences and the annual report will be available to residents at the Town of Petawawa Municipal Office. Notification will be at the Municipal Office and copies provided free of charge, if requested. The Town of Petawawa office is located at 1111 Victoria Street in Petawawa, ON.

Compliance Report Card

Compliance Event	# of Events
Ministry of the Environment, Conservation and Parks (MECP) Inspection(s)	Feb 27, 2019 – received 95.01% (2018-2019 Inspection period) Nov 14, 2019 – received 100% (2019-2020 Inspection period)
Ministry of Labour Inspection(s)	There were no inspections during the reporting period.
QEMS External Audit	S1 - Surveillance System Audit (Off-Site Audit) – completed on Oct 22, 2019 – No non-conformances identified.
AWQI's	Sodium exceedance in Distribution Monthly filtered performance for Feb 2019
Non-Compliances	There were no non-compliances reported during the reporting period.
Community Complaints	Twenty-one (21) Community Complaints: Water pressure - 8 Frozen water service - 3 Aesthetics - 8 Other - 2
Spills	There were no Spills reported during the reporting period.
Water Main Breaks	Two (2)

System Process Description

Raw Source

The source water to the Petawawa WTP is the Ottawa River (Allumette Lake). Once water is treated, it is supplied to the distribution system. The Petawawa WTP supplies water to Garrison Petawawa (Federal Jurisdiction). The south end of the distribution system is connected (only if required) to the City of Pembroke/Laurentian Valley Drinking Water System. Flow is controlled using Booster Pumping Station #1.

Treatment

Petawawa Water Treatment Plant is a conventional water treatment system using coagulation, flocculation, and sedimentation processes. Pre and post pH adjustment is also utilized. Dual media filters provide filtration, and chlorine gas is used for disinfection. Fluoridation is also practiced.

<u>Treatment Chemicals used during the reporting year:</u>

Chemical Name	Use	Supplier
PAS-8/PASS-10	Coagulant	Kemira
Fluoride	Fluoridation	Brenntag
Soda Ash Dense (bulk/bags)	pH Adjustment	Univar/Reliable Industrial Supply
Chlorine Gas	Disinfection	Brenntag
Superfloc A-100 Flocculant	Coagulant Aid (Polymer)	Kemira

Distribution

The distribution consists of a network of piping, three (3) towers and two (2) booster pumping stations. The distribution system consists of about 3 100 service connections in the Town of Petawawa, approximately 3 000 of which are residential. There are approx. 35 dead ends and approx. 596 fire hydrants. The distribution pipes are made of asbestos cement, cast iron, and polyvinyl chloride (PVC).

Summary of Non-Compliances

Adverse Water Quality Incidents

Date	AWQI#	Location	Problem	Details	Legislation	Corrective Action Taken
Apr 23, 2019	145263	Distribution Water – BPS#1	Sodium (Na) Exceedance – 28 mg/L	Reported by laboratory when test was completed as part of routine testing completed	No limit on distribution sodium	Re-sampled. Results: Distribution – 16 mg/L, Treated – 14 mg/L. No further actions required.
Mar 1, 2019	144900	Filter Effluent	Filter Performance	Filter Performance Feb 2019 was 90.07%	Procedure for Disinfection > 95%	Reported as an AWQI to MECP on Mar 1, 2019. No further action required.

Non-Compliances

Legislatio	n	Requirement(s) system failed to meet	Duration of the failure (i.e. date(s))	Corrective Action	Status
		There were no non-compl	liance issues reported du	ring the reporting period.	

Non-Compliances Identified in a Ministry Inspection: (2018-2019 Inspection)

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
DWWP	Form 2's for modifications or replacements were not completed prior to work completed	Feb 27, 2019 – Jul 8, 2019	Completed Form 2 for the two (2) polymer pump replacements.	Completed
O. Reg. 170/03, Procedure for Disinfection of Drinking Water	Filtered Water Turbidity less than or equal to 0.3 NTU in 95% of the measurements each month for each filter	Feb 2019	Reported as required. Operators optimized process by adjusting chemical dosage and filter backwashes.	Completed
MDWL, O. Reg. 170/03	The 2018 Annual Report did not include test results on some of the on-line data, and the Process Flow Diagram (PFD) did not show the chlorine addition point	Feb 27, 2019 – Jul 8, 2019	Revised 2018 Annual Water Report to include the missed data. Updated Process Flow Diagram.	Completed

Flows

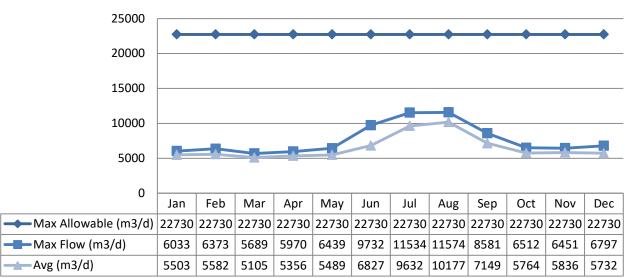
In 2019, the average day flow was at approximately 28.3% of the current plant design for the Petawawa Drinking Water System, and the maximum day flow was at approximately 53.8% of the plant design of $21.500 \text{ m}^3/\text{d}$.

Raw Water Flows

The Raw Water flows are regulated under the Permit to Take Water. 2019 Raw Flow Data was submitted to the Ministry electronically under permit #3814-9J2RQN. The confirmation and a copy of the data that was submitted are attached in Appendix A.

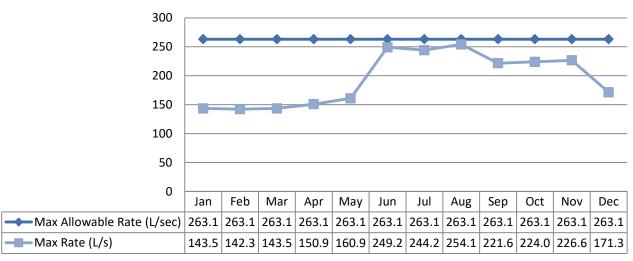
Total Monthly Flows (m3/d)

Max Allowable - PTTW



Monthly Rated Flows (L/s)

Max allowable rate - PTTW

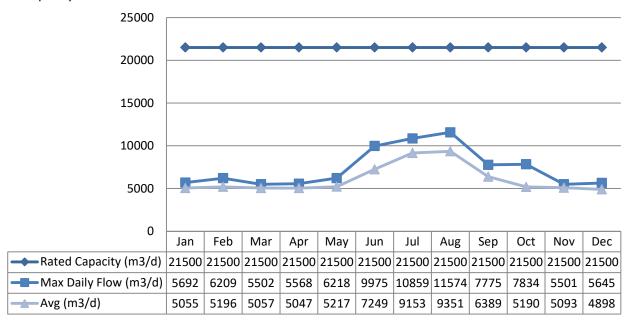


Treated Water Flows

The Treated Water flows are regulated under the Municipal Licence.

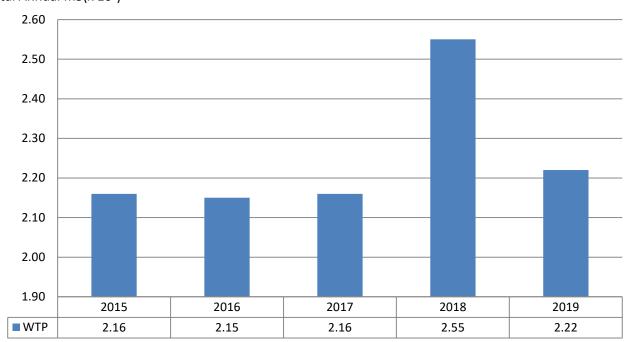
Monthly Rated Flows

Rated Capacity - MDWL



Annual Total Flow Comparison

Total Annual m3(x 10⁶)



Regulatory Sample Results Summary

Microbiological Testing

	No. of Samples Collected	Range of E.	Range of E. Coli Results		Range of Total Coliform Results		Range of HPC Results		
		Min	Max	Min	Max	No. Samples	Min	Max	
Raw Water	53	0	4	0	67				
Treated Water	54	0	0	0	0	54	0	5	
Distribution Water	404	0	0	0	0	404	0	500	

Operational Testing

	No. of Samples	Range o	f Results
	Collected	Minimum	Maximum
Turbidity, In-House (NTU) - RW	104	0.101	8.74
Turbidity, On-Line (NTU) - RW	8760	0.42	8.434
Turbidity, In-House (NTU) - TW	104	0.058	0.7
Turbidity, In-House (NTU) - Filt1	104	0.042	0.293
Turbidity, On-Line (NTU) – Filt1	8760	0	2
Turbidity, In-House (NTU) - Filt2	104	0.047	0.344
Turbidity, On-Line (NTU) – Filt2	8760	0	2
Turbidity, In-House (NTU) - Filt3	105	0.043	0.301
Turbidity, On-Line (NTU) – Filt3	8760	0	2
Free Chlorine Residual, In-House (mg/L) - TW	105	0.98	1.91
Free Chlorine Residual, On-Line (mg/L) - TW	8760	0.7	3.93
Total Chlorine Residual, In-House (mg/L) - TW	104	1.4	2.29
Free Chlorine Residual, In-House (mg/L) - DW	404	0.25	1.42
Free Chlorine Residual, On-Line (mg/L) - DW	8760	0	3.60
Fluoride Residual, In-House (mg/L) - TW	137	0.35	0.8
Fluoride Residual, On-Line (mg/L) - TW	8760	0	1.33

NOTE: Spikes recorded by on-line instrumentation were a result of air bubbles and various maintenance/calibration activities. All spikes are reviewed for compliance with MDWL

Inorganic Parameters

These parameters are tested as a requirement under 170/03. Sodium and Fluoride are required to be tested every 5 years. Nitrate and Nitrite are tested quarterly and the metals are tested annually, as required under 170/03. In the event any of the parameters exceed half of the maximum allowable concentration, the parameter is required to be sampled quarterly.

- MAC = Maximum Allowable Concentration as per O. Reg. 169/03
- BDL = Below the laboratory detection level

	Sample Date	Sample Result	MAC	No. of Exceedances		
	(yyyy/mm/dd)	Sample Result	IVIAC	MAC	1/2 MAC	
Treated Water						
Antimony: Sb (ug/L) - TW	2019/01/07	<mdl 0.5<="" td=""><td>6.0</td><td>No</td><td>No</td></mdl>	6.0	No	No	
Arsenic: As (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>10.0</td><td>No</td><td>No</td></mdl>	10.0	No	No	

	Sample Date	Comple Besult	MAC	No. of Exc	eedances
	(yyyy/mm/dd)	Sample Result	IVIAC	MAC	1/2 MAC
Barium: Ba (ug/L) - TW	2019/01/07	10.0	1000.0	No	No
Boron: B (ug/L) - TW	2019/01/07	<mdl 10.0<="" td=""><td>5000.0</td><td>No</td><td>No</td></mdl>	5000.0	No	No
Cadmium: Cd (ug/L) - TW	2019/01/07	<mdl 0.1<="" td=""><td>5.0</td><td>No</td><td>No</td></mdl>	5.0	No	No
Chromium: Cr (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>50.0</td><td>No</td><td>No</td></mdl>	50.0	No	No
Mercury: Hg (ug/L) - TW	2019/01/07	<mdl 0.1<="" td=""><td>1.0</td><td>No</td><td>No</td></mdl>	1.0	No	No
Selenium: Se (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>50.0</td><td>No</td><td>No</td></mdl>	50.0	No	No
Uranium: U (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>20.0</td><td>No</td><td>No</td></mdl>	20.0	No	No
Additional Inorganics					
Fluoride (mg/L) - TW	2019/12/30	0.67	1.5	No	No
Nitrite (mg/L) - TW	2019/01/07	<mdl 0.1<="" td=""><td>1.0</td><td>No</td><td>No</td></mdl>	1.0	No	No
Nitrite (mg/L) - TW	2019/04/01	<mdl 0.1<="" td=""><td>1.0</td><td>No</td><td>No</td></mdl>	1.0	No	No
Nitrite (mg/L) - TW	2019/07/02	<mdl 0.1<="" td=""><td>1.0</td><td>No</td><td>No</td></mdl>	1.0	No	No
Nitrite (mg/L) - TW	2019/10/07	<mdl 0.1<="" td=""><td>1.0</td><td>No</td><td>No</td></mdl>	1.0	No	No
Nitrate (mg/L) - TW	2019/01/07	0.21	10.0	No	No
Nitrate (mg/L) - TW	2019/04/01	0.26	10.0	No	No
Nitrate (mg/L) - TW	2019/07/02	0.25	10.0	No	No
Nitrate (mg/L) - TW	2019/10/07	0.22	10.0	No	No
Sodium: Na (mg/L) - TW	2019/04/29	14.0	20.0*	Yes	Yes

^{*}There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified mg/L when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

Schedule 15 Sampling:

The Schedule 15 Sampling is required under MDWL. This system is under the plumbing exemption therefore, hydrant samples only were collected. (*Lead will be sampled again in 2021 – every 3 yrs)

Distribution System	Number of Sampling	Number of Samples	Range o	f Results	MAC	Number of	
Points		realiser of samples	Minimum	Maximum	(mg/L)	Exceedances	
Alkalinity (mg/L)	4	8	25	63	500	0	
рН	4	8	6.82	7.47	8.5	0	
Lead (mg/L)	n/a	n/a*	n/a	n/a	0.10	0	

Organic Parameters

These parameters are tested annually as a requirement under MDWL. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

	Sample Date	Sample	MAC	Number of Exceedances	
	(yyyy/mm/dd)	Result		MAC	1/2 MAC
Treated Water					
Alachlor (ug/L) - TW	2019/01/07	<mdl 0.5<="" td=""><td>5.00</td><td>No</td><td>No</td></mdl>	5.00	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2019/01/07	<mdl 0.2<="" td=""><td>5.00</td><td>No</td><td>No</td></mdl>	5.00	No	No
Azinphos-methyl (ug/L) - TW	2019/01/07	<mdl 2.0<="" td=""><td>20.00</td><td>No</td><td>No</td></mdl>	20.00	No	No
Benzene (ug/L) - TW	2019/01/07	<mdl 0.5<="" td=""><td>1.00</td><td>No</td><td>No</td></mdl>	1.00	No	No
Benzo(a)pyrene (ug/L) - TW	2019/01/07	<mdl 0.01<="" td=""><td>0.01</td><td>No</td><td>Yes*</td></mdl>	0.01	No	Yes*

	Sample Date Sample		NAAC	Number of Exceedances	
	(yyyy/mm/dd)	Result	MAC	MAC	1/2 MAC
Bromoxynil (ug/L) - TW	2019/01/07	<mdl 0.5<="" td=""><td>5.00</td><td>No</td><td>No</td></mdl>	5.00	No	No
Carbaryl (ug/L) - TW	2019/01/07	<mdl 5.0<="" td=""><td>90.00</td><td>No</td><td>No</td></mdl>	90.00	No	No
Carbofuran (ug/L) - TW	2019/01/07	<mdl 5.0<="" td=""><td>90.00</td><td>No</td><td>No</td></mdl>	90.00	No	No
Carbon Tetrachloride (ug/L) - TW	2019/01/07	<mdl 0.2<="" td=""><td>2.00</td><td>No</td><td>No</td></mdl>	2.00	No	No
Chlorpyrifos (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>90.00</td><td>No</td><td>No</td></mdl>	90.00	No	No
Diazinon (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>20.00</td><td>No</td><td>No</td></mdl>	20.00	No	No
Dicamba (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>120.00</td><td>No</td><td>No</td></mdl>	120.00	No	No
1,2-Dichlorobenzene (ug/L) - TW	2019/01/07	<mdl 0.4<="" td=""><td>200.00</td><td>No</td><td>No</td></mdl>	200.00	No	No
1,4-Dichlorobenzene (ug/L) - TW	2019/01/07	<mdl 0.4<="" td=""><td>5.00</td><td>No</td><td>No</td></mdl>	5.00	No	No
1,2-Dichloroethane (ug/L) - TW	2019/01/07	<mdl 0.2<="" td=""><td>5.00</td><td>No</td><td>No</td></mdl>	5.00	No	No
1,1-Dichloroethylene (ug/L) - TW	2019/01/07	<mdl 0.5<="" td=""><td>14.00</td><td>No</td><td>No</td></mdl>	14.00	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW	2019/01/07	<mdl 4.0<="" td=""><td>50.00</td><td>No</td><td>No</td></mdl>	50.00	No	No
2,4-Dichlorophenol (ug/L) - TW	2019/01/07	<mdl 0.2<="" td=""><td>900.00</td><td>No</td><td>No</td></mdl>	900.00	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>100.00</td><td>No</td><td>No</td></mdl>	100.00	No	No
Diclofop-methyl (ug/L) - TW	2019/01/07	<mdl 0.9<="" td=""><td>9.00</td><td>No</td><td>No</td></mdl>	9.00	No	No
Dimethoate (ug/L) - TW	2019/01/07	<mdl 2.5<="" td=""><td>20.00</td><td>No</td><td>No</td></mdl>	20.00	No	No
Diquat (ug/L) - TW	2019/01/07	<mdl 5.0<="" td=""><td>70.00</td><td>No</td><td>No</td></mdl>	70.00	No	No
Diuron (ug/L) - TW	2019/01/07	<mdl 10.0<="" td=""><td>150.00</td><td>No</td><td>No</td></mdl>	150.00	No	No
Glyphosate (ug/L) - TW	2019/01/07	<mdl 10.0<="" td=""><td>280.00</td><td>No</td><td>No</td></mdl>	280.00	No	No
Malathion (ug/L) - TW	2019/01/07	<mdl 0.5<="" td=""><td>190.00</td><td>No</td><td>No</td></mdl>	190.00	No	No
2-Methyl-4-chlorophenoxyacetic Acid (MCPA) (ug/L) - TW	2019/01/07	<mdl 10.0<="" td=""><td>100.00</td><td>No</td><td>No</td></mdl>	100.00	No	No
Metolachlor (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>50.00</td><td>No</td><td>No</td></mdl>	50.00	No	No
Metribuzin (ug/L) - TW	2019/01/07	<mdl 5.0<="" td=""><td>80.00</td><td>No</td><td>No</td></mdl>	80.00	No	No
Monochlorobenzene (Chlorobenzene) (ug/L) - TW	2019/01/07	<mdl 0.5<="" td=""><td>80.00</td><td>No</td><td>No</td></mdl>	80.00	No	No
Paraquat (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>10.00</td><td>No</td><td>No</td></mdl>	10.00	No	No
PCB (ug/L) - TW	2019/01/07	<mdl 0.1<="" td=""><td>3.00</td><td>No</td><td>No</td></mdl>	3.00	No	No
Pentachlorophenol (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>60.00</td><td>No</td><td>No</td></mdl>	60.00	No	No
Phorate (ug/L) - TW	2019/01/07	<mdl 0.5<="" td=""><td>2.00</td><td>No</td><td>No</td></mdl>	2.00	No	No
Picloram (ug/L) - TW	2019/01/07	<mdl 5.0<="" td=""><td>190.00</td><td>No</td><td>No</td></mdl>	190.00	No	No
Prometryne (ug/L) - TW	2019/01/07	<mdl 0.25<="" td=""><td>1.00</td><td>No</td><td>No</td></mdl>	1.00	No	No
Simazine (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>10.00</td><td>No</td><td>No</td></mdl>	10.00	No	No
Terbufos (ug/L) - TW	2019/01/07	<mdl 0.4<="" td=""><td>1.00</td><td>No</td><td>No</td></mdl>	1.00	No	No
Tetrachloroethylene (ug/L) - TW	2019/01/07	<mdl 0.3<="" td=""><td>30.00</td><td>No</td><td>No</td></mdl>	30.00	No	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>100.00</td><td>No</td><td>No</td></mdl>	100.00	No	No
Triallate (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>230.00</td><td>No</td><td>No</td></mdl>	230.00	No	No
Trichloroethylene (ug/L) - TW	2019/01/07	<mdl 0.3<="" td=""><td>5.00</td><td>No</td><td>No</td></mdl>	5.00	No	No
2,4,6-Trichlorophenol (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>5.00</td><td>No</td><td>No</td></mdl>	5.00	No	No
Trifluralin (ug/L) - TW	2019/01/07	<mdl 1.0<="" td=""><td>45.00</td><td>No</td><td>No</td></mdl>	45.00	No	No
Vinyl Chloride (ug/L) - TW	2019/01/07	<mdl 0.2<="" td=""><td>1.00</td><td>No</td><td>No</td></mdl>	1.00	No	No
Distribution Water					
Trihalomethane: Total (ug/L) Annual Average - DW	2019	46.8	100.00	No	No

Rev. 0 | Issued: 27-Feb-2020 | Page | 9

	Sample Date	Sample	MAC	Number of Exceedances MAC 1/2 MAC N/A N/A	
	(yyyy/mm/dd)	Result		MAC	1/2 MAC
HAA: Total (ug/L) Annual Average - DW	2019	52.4	80.0	N/A	N/A

MAC = Maximum Allowable Concentration, as per O. Reg. 169/03

Additional Legislated Samples

Legislation	Sample	Parameter	Date	Result	MAC
MDWL	Backwash Effluent	Suspended Solids	January	7.0 mg/L	
			April	12.0 mg/L	
			July	4.0 mg/L	
			October	< 2.0 mg/L	
			Annual Average	6.25 mg/L	25 mg/L

Major Maintenance Summary (Capital)

WO #	Description
1258301	Comprehensive visual and diagnostic inspection to confirm or deny the presence of mold, moisture, or other indoor environmental concerns.
1219965	Titration curves and Jar testing performed by OCWA Engineering.
1258244	Replacement maintenance parts required for the soda ash pumps.
1138818	Parts for the primary coagulant pump.
1138819	Purchasing of parts for the annual maintenance of the CL2 injection systems throughout the distribution system.
1258926	Trac vac parts, belts for grit blower, bearings to rebuild tractor deck, marking paint, backup solenoid for soda ash system, repair kits, valve assembly and seals, spindle for lawn mower, oil filter for air compressor, stator rope, blade, service call on auger main line by Watson Mechanical, shovel, monitor for SCADA, and other miscellaneous hardware.
1299889	Annual maintenance and inspection of air compressors and related equipment at the water plant.
1420659	Supply and installation of the new SCADA workstation at the plant, since the old workstations are no longer compatible with the upgraded PLC and software.
1176683	Replacement impellor required for pump at BPS#2.
1177887	Light bulb for town tower, plumbing supplies for men's washroom, sink repairs, gaskets for BPS#2 pump install, marking paint, motor, boiler filters, oil change material for generators at the town and township tower, plug to plug the drain line at the water plant (during state of emergency), spare coupler for boiler circulating pumps, hardware for preventative maintenance on chemical pumps, and other miscellaneous hardware.
1178134	Water service leak repair on Doran Road.
1138656	Replacement of curb stop and thawing of service line.

^{*}BDL = Below the laboratory detection level

1138716	Service leak repair.
1337950	Located curb stop to diagnose low pressure.
1338030	Replacement of CL2 analyzer at BPS#2.
1177220	Replacement of heater required at Town Tower.
1101270	Replacement IP conversion modules for filter actuators.
1101456	Cable, drill bits, service call, miscellaneous hardware, service call from Capital Controls, supplies for repairs at BPS#1, LED exit light, fittings for CL2 line repair, small engine repairs, new motor for shop heater, seal bearing, movable shelf, PAS-8 tank feeder line, eye wash station straps, and sample vials.
1102253	Repair of curb stop on Easy Street.
1104487	Purchase of analyzer parts for the repair of the fluoride analyzer.

Distribution Maintenance

Date	Location Reference	Details
Feb 2019	Mulvihill Drug Mart on Petawawa Blvd.	Water main break
Feb 2019	BPS#1	Replaced damaged fitting for pressure switch on pump #1
Apr 2019	Various Locations	Hydrant Sampling (Lead – pH and alkalinity
Oct 2019		testing)
May 2019	Base Tower	Live tap by Eastway Construction
May 2019	John Street	Live Tap
Jun 2019	Various Locations	Six (6) Tie-Ins to water distribution main
Jul 2019	Mary Street	Shut down water main and remove check valve
Nov 2019	Shaw Lumber	Water shut off for hydrant repair
Dec 2019	Mohns Avenue	Water main break
Seasonal Flushing	Town of Petawawa	System Flushing (Spring & Fall)
2019	Various Locations	Eight (8) Service repairs
2019	Various Locations	Five (5) Repaired hydrants and Winterizing
2019	Town of Petawawa	Valve Exercising
2019	Various Locations	Three (3) Flush dead end hydrants
2019	Various locations	Twenty-one (21) Water Inspections
2019	Various Locations	One (1) Locate Request

Appendix A

WTRS Data and Submission Confirmation

					PETAWAWA DR	INKING WATER SY	STEM / Raw Wate	er				
					Yearly :	Summary (Flow DAI	LY) 2019					
	Annual Values and Summary						Units:	cubic meter per day		Report extracted 02/04/2020	09:53	
s	station:						Omo.		y Max:	11574.0 on August 06		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4985.00	6275.00	5130.00	5623.00	5068.00	6253.00	6859.00	10474.00	7892.00	5926.00	5622.00	5604.00
2	5143.00	5240.00	5091.00	4972.00	5107.00	6506.00	8845.00	11066.00	8581.00	5985.00	5504.00	6797.00
3	5260.00	5331.00	4966.00	5234.00	5144.00	7019.00	9448.00	10924.00	8538.00	5571.00	5631.00	6145.00
4	5054.00	6139.00	5689.00	4788.00	4991.00	6106.00	9357.00	9828.00	7640.00	5724.00	6082.00	6033.00
5	5104.00	4556.00	5360.00	5204.00	5325.00	6269.00	10345.00	10937.00	7737.00	5435.00	5905.00	6398.00
6	5236.00	5874.00	5035.00	4769.00	6175.00	6154.00	10402.00	11574.00	7828.00	5676.00	5838.00	6086.00
7	5502.00	4968.00	5658.00	5149.00	5929.00	7278.00	10144.00	10200.00	6133.00	6512.00	5601.00	5822.00
8	5535.00	5741.00	5183.00	5602.00	5760.00	7713.00	10564.00	9420.00	6600.00	6159.00	5378.00	5932.00
9	5481.00	5914.00	4884.00	5799.00	5781.00	8188.00	11504.00	8222.00	7384.00	5680.00	5586.00	6455.00
10	5304.00	5548.00	4836.00	5127.00	5071.00	9732.00	11106.00	8476.00	7717.00	5803.00	5474.00	5868.00
11	5449.00	6032.00	5064.00	5633.00	4741.00	5701.00	11007.00	8401.00	7022.00	5796.00	6099.00	6153.00
12	5205.00	5611.00	4748.00	5394.00	5541.00	6454.00	6712.00	10144.00	6983.00	5751.00	5315.00	6208.00
13	5499.00	4995.00	4984.00	5282.00	5742.00	6650.00	7419.00	8940.00	7310.00	5296.00	5811.00	6240.00
14	5902.00	5276.00	4854.00	5266.00	5276.00	5329.00	6561.00	9864.00	5953.00	5496.00	6024.00	5911.00
15	5542.00	5699.00	5105.00	5970.00	5312.00	5406.00	7808.00	10625.00	6324.00	5899.00	5692.00	5535.00
16	5283.00	5377.00	4822.00	5378.00	5260.00	4827.00	8377.00	10307.00	7582.00	5828.00	5577.00	6367.00
17	5930.00	6373.00	4138.00	5459.00	5111.00	6828.00	9051.00	10761.00	6732.00	6061.00	5685.00	5718.00
18	5379.00	5803.00	5357.00	5576.00	5150.00	7282.00	9611.00	8659.00	7763.00	5802.00	5957.00	5699.00
19	5383.00	6319.00	5534.00	5447.00	5166.00	7353.00	9518.00	11178.00	7761.00	5761.00	6451.00	5746.00
20	5898.00	5779.00	5197.00	5251.00	4885.00	7496.00	9886.00	11175.00	7725.00	5806.00	5428.00	4196.00
21	5682.00	5452.00	5386.00	4816.00	5823.00	5995.00	9686.00	11512.00	7322.00	6010.00	5915.00	5466.00
22	5776.00	5675.00	4938.00	5011.00	5717.00	6602.00	10812.00	10815.00	7214.00	6154.00	5964.00	5113.00
23	5448.00	5053.00	5381.00	5471.00	5509.00	7441.00	10454.00	10805.00	7545.00	5141.00	5822.00	5391.00
24	5448.00	5301.00	4987.00	5483.00	5476.00	8729.00	10146.00	9220.00	6666.00	5750.00	5995.00	5387.00
25	5686.00	5909.00	5631.00	5727.00	5377.00	7484.00	10407.00	10543.00	6609.00	5911.00	6129.00	5544.00
26	5481.00	5504.00	5220.00	5704.00	4857.00	6007.00	11534.00	11574.00	6403.00	5148.00	6124.00	5163.00
27	5525.00	5490.00	5264.00	5102.00	6114.00	6923.00	11413.00	11574.00	6519.00	5482.00	6431.00	5071.00
28	6033.00	5052.00	4971.00	5210.00	6330.00	8055.00	10340.00	9787.00	6245.00	5791.00	6024.00	5522.00
29	5916.00		5468.00	5623.00	5829.00	6454.00	10032.00	9727.00	5936.00	5681.00	6132.00	5490.00
30	5833.00		4752.00	5602.00	6439.00	6571.00	9218.00	10625.00	6794.00	5831.00	5872.00	5099.00
31	5704.00		4610.00		6148.00		10041.00	8129.00		5817.00		5529.00
Min	4985.00	4556.00	4138.00	4769.00	4741.00	4827.00	6561.00	8129.00	5936.00	5141.00	5315.00	4196.00
Mean	5503.42	5581.64	5104.61	5355.73	5488.84	6826.83	9632.48	10176.97	7148.60	5763.97	5835.60	5731.87
Max	6033.00	6373.00	5689.00	5970.00	6439.00	9732.00	11534.00	11574.00	8581.00	6512.00	6451.00	6797.00
gend:	'' Missing Data				Created on		02/04/20 09:53			by roycebr		
	'+' No Day				Created On		02.04/20 05.00			S, roycesi		



Location: WTRS / WT DATA / Input WT Record

WTRS-WT-008

Water Taking Data submitted successfully.

Confirmation:

Thank you for submitting your water taking data online.

Permit Number: 3814-9J2RQN

Permit Holder: THE CORPORATION OF THE TOWN OF PETAWAWA.

Received on: Feb 4, 2020 10:12 AM

This confirmation indicates that your data has been received by the Ministry, but should not be construed as acceptance of this data if it differs from that specified on the Permit Number, assigned to the Permit Holder stated above.

Return to Main Page

TOWN2 PETAWAWA2 | 2020/02/04

version: v4.5.0.21 (build#: 22) Last modified: 2018/09/18

©2020Queen's Printer for Ontario

