

February 28, 2017

Mr. David Unrau  
Director of Public Works  
Town of Petawawa  
1111 Victoria Street  
Petawawa, ON  
K8H 2E6

Dear David:

**RE: 2016 Annual Reports Required By Ontario Regulations**

Please find attached the 2016 Summary Report for the Petawawa Drinking Water System. This report is completed based on the information we have in our records in accordance with Schedule 22 of O. Reg. 170/03, under the Safe Drinking Water Act. This schedule requires a Summary Report to be prepared no later than March 31<sup>st</sup> of each year for the preceding calendar year.

Any orders that you have received directly from the Ministry of the Environment and Climate Change (MOECC) should be reviewed. Where non-compliance with the Order is evident and it is not included in the attached 2016 Summary Report, then, we recommend that this information be added.

After your review and inclusion of any additional information, this Summary Report is to be provided to the members of the municipal council. It is also important to record and keep on record that this document was reviewed in council (resolution of council).

Also, attached is the Section 11 Annual Report. This report is prepared to satisfy the requirements of O. Reg. 170/03, Section 11. It should also be noted that a copy of this report is no longer required to be submitted to the MOECC.

As part of the requirements of the Water Taking and Transfer Regulation (O. Reg. 387/04), it is required that all the raw water daily flow volumes are submitted electronically for review by the MOECC. A copy of the data that was submitted is attached in this report, as well as a copy of the confirmation that the data was received.

Section 12 of O. Reg. 170/03 requires that these reports be made available for inspection by any member of the public during normal business hours, without charge. The reports are to be made available for inspection on the internet and at the office of the municipality.

Sincerely,

*Brenda Royce*

Brenda Royce  
Process and Compliance Technician  
Ontario Clean Water Agency  
Laurentian View Cluster  
Eastern Region  
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Copy to File





## ***PETAWAWA DRINKING WATER SYSTEM 2016 ANNUAL REPORT***



**Prepared by:**

*Brenda Royce*

**Process and Compliance Technician  
Laurentian View Cluster – Eastern Region  
02/07/2017**



**Ontario Clean Water Agency  
Agence Ontarienne Des Eaux**

## Foreword

This document contains three different reports required for the Petawawa Drinking Water System:

- Section 11, Annual Report, as per the SDWA, 2002- Section 11 of the Ontario Regulation 170/03
- Summary Report, as per the SDWA, 2002- Schedule 22 of the Ontario Regulation 170/03
- Summary of the Raw Water values that were submitted to the Ministry of the Environment under the Ontario Regulation 387/04, OWRA, 1990- Water Taking.

Section 12 of Ontario Regulation 170/03 of the SDWA, 2002, requires both the Summary Report and the Annual Report be made available for inspection by any member of the public during normal business hours, without charge. These reports are to be made available for inspection at the office of the municipality and on the municipality internet site.

**SECTION 11**  
**ANNUAL REPORT 2016**



**Drinking Water Systems Regulation O. Reg. 170/03**  
**Section 11- Annual Report**

**System Information:**

<b>Drinking Water System Name</b>	Petawawa Drinking Water System
<b>Municipal Drinking Water License #</b>	199-101, Issue #2
<b>Drinking Water Works Permit #</b>	199-201, Issue #2
<b>Drinking Water System Number</b>	210002101
<b>System Owner</b>	Town of Petawawa
<b>Operating Authority</b>	Ontario Clean Water Agency
<b>Drinking Water System Category</b>	Large Municipal Residential
<b>DWQMS Status (SAI Global Certified- File # 1634127-01)</b>	Full Scope/ Entire DWQMS Accreditation on December 15, 2012
<b>Reporting Period</b>	January 1, 2016 – December 31, 2016

**Summary Report (170/03 Schedule 22) will be available for inspection at:**

Town of Petawawa 1111 Victoria Street Petawawa, ON K8H 2E6
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**List all Drinking Water Systems which receive all of their drinking water from your system:**

Name	Drinking Water System Number
CFB Petawawa	Federal jurisdiction

**Provide a brief description of the system:**

Petawawa Water Treatment Plant is a conventional water treatment system using PAS-8 as the primary coagulant, and polymer as the secondary coagulant to achieve coagulation, flocculation, and sedimentation. Pre and post pH adjustment with soda ash is also utilized during the water treatment process. Dual media filters provide filtration and chlorine gas is used for disinfection. Fluoridation is also practiced.
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**What Treatment Chemicals were used during the Reporting Year:**

Chemical Name	Use	Supplier
PAS-8	Coagulant	Kemira
Fluoride	Fluoridation	Brenntag
Soda Ash Dense	pH Adjustment	Solvay Chemicals, Inc.
Chlorine Gas	Disinfection	Brenntag
Superfloc A-100 Flocculant (Polymer)	Coagulant Aid	Kemira

**Summary of any Reports made to the Ministry under Subsection 18 (1) of the Act or Section 16-4 of Schedule 16:**

DRINKING WATER LEGISLATION	AWQI #	Cause			STATUS
		PARAMETER/EQUIPMENT FAILURE	DURATION	CORRECTIVE ACTION TAKEN	
SDWA 170/03	128334	Loss of Trending for the BPS #1 & BPS #2& Township Tower	Feb. 22/16	Re-started main SCADA computer and trending restored.	Completed

**Does your Drinking-Water System serve more than 10 000 people?**

YES

NO

**If yes, is your annual report available to the public at no charge on a web site on the internet?**

YES

NO

**Indicate how you notified system users that your annual report is available, and is free of charge?**

- Notice via Government Office
- Town of Petawawa internet Web-Site

**Capacity Assessment of the Petawawa Drinking Water System:**

Year	2012	2013	2014	2015	2016
Av. Day Flow (m <sup>3</sup> /d)	7 159.3	6 463.48	6 162.13	5 916.25	5 876.01
Design Capacity (m <sup>3</sup> /d)	21 500.0	21 500.0	21 500.0	21 500.0	21 500.0
<b>% of Capacity</b> (based on av. day flows)	33.3	30.1	28.7	27.5	27.3
Max. Day Flow (m <sup>3</sup> /d)	13 860.0	11 664.0	12 037.0	9 922.0	12 559.0
<b>% of Capacity</b> (based on max. day flows)	64.5	54.3	56.0	46.1	58.4

In 2016, the average day flow was at approximately 27.3 % of the current plant design, and the maximum day flow was at approximately 58.4 % of the plant design of 21 500.0 m<sup>3</sup>/d.

**Microbiological Testing (Ont. Reg. 170/03, Sch.10, Sch.11 or Sch.12 & Ont. Reg. 169/03 Standards – Not Detectable):**

	# of E-coli Samples Taken	E-Coli Results (min-max)	# of Total Coliform Samples Taken	Total Coliform Results (min-max)	# of HPC Samples Taken	HPC Results (min-max)
Raw	52	0-4	52	0-161	0	N/A
Treated	52	0-0	52	0-0	52	0-1
Distribution	316	0-0	316	0-0	316	0-303

**Operational Testing, On-Line (Ont. Reg. 170/03, Sch. 7, Sch. 8 or Sch. 9):**

Parameter	Ont. Reg. 170/03 Standard	Range of Results (min # - max #)
Filter #1 Turbidity	1 NTU	0 – 2.000 NTU
Filter #2 Turbidity	1 NTU	0 – 0.880 NTU
Filter #3 Turbidity	1 NTU	0 – 0.910 NTU
Treated Free Chlorine	0.05 mg/L – 4 mg/L	0 – 4.4 mg/L*
Distribution Free Chlorine**	0.2 mg/L – 4.0 mg/L	0.28 – 1.63 mg/L*
Treated Fluoride	1.5 mg/L***	0 – 0.56 mg/L

\*spikes recorded by on-line instrumentation were a result of various maintenance/calibration activities and power outages. All spikes are reviewed for compliance with O. Reg. 170/03 and reported as required.

\*\*Includes all Booster Stations (2) and Tower (3) samples.

\*\*\*Where fluoride is added to drinking water, it is recommended that the concentration be adjusted to 0.5 – 0.8 mg/L which is the optimum level for the control of tooth decay. Where supplies contain naturally occurring fluoride at levels higher than 1.5 mg/L, but less than 2.4 mg/L, the Ministry of Health and Long Term Care recommends an approach through the local boards of health to raise public and professional awareness to control excessive exposure to fluoride from other sources (taken from the Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, June 2006, MOE PIBS 4449e01).

**Summary of Additional Non-Required Samples, In-House:**

Parameter	# of grab samples taken	Ont. Reg. 170/03 / Ont. Reg. 169/03 Standard (MAC), as applicable	Range of Results (min # - max #)
Treated Water Free Chlorine	104	0 mg/L – 1.0 mg/L	1.26 – 1.95 mg/L
Treated Water Fluoride	88	1.5 mg/L	0.39 – 0.77 mg/L
Treated Water Turbidity	100	1 NTU	0.05 – 9.5 NTU
Treated Water Alkalinity	53	30 – 500 mg/L (OG)*	21 – 39 mg/L
Treated Water Aluminum	103	0.1 mg/L (OG)	0 – 3 mg/L
Treated Water Colour	104	5 TCU (AO)**	< 1 – < 5.0 TCU
Treated Water pH	104	6.5 – 8.5 (OG)	6.02 – 7.52
Distribution Free Chlorine	324	0.2 mg/L – 4.0 mg/L	0.28 – 1.63 mg/L
Filter #1 Turbidity	104	1 NTU	0.054 – 0.800 NTU



Filter #2 Turbidity	104	1 NTU	0.052 – 0.700 NTU
Filter #3 Turbidity	104	1 NTU	0.041 – 0.364 NTU

\* (OG) - Operational Guidelines- are established for parameters that, if not controlled, may negatively affect the efficient and effective treatment, disinfection and distribution of the water.

\*\* (AO) – Aesthetic Objectives- are established for parameters that may impair the taste, odour or colour of water, or which may interfere with good water quality control practices (taken from the Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, MOECC PIBS 4449e01, June 2006).

### Laboratory:

Parameter	# of grab samples taken	Ont. Reg. 170/03 / Ont. Reg. 169/03 Standard (MAC), as applicable	Range of Results (min # - max #)
Treated Water Alkalinity	52	30 – 500 mg/L (OG)	25 – 48 mg/L
Treated Water Colour	52	5 TCU (AO)	< 2 – < 4 TCU
Treated Water Conductivity	52	300 – 500 uS/cm	116 – 170 uS/cm
Treated Water pH	52	6.5 – 8.5 (OG)	6.96 – 7.94
Treated Water Total Dissolved Solids	52	500 mg/L (AO)	40 – 120 mg/L
Treated Water Hardness	52	80 – 100 mg/L (OG)	14 – 28 mg/L
Treated Water Fluoride	52	1.5 mg/L	0.2 – 0.67 mg/L
Distribution Water Alkalinity	164	30 – 500 mg/L (OG)	22 – 52 mg/L
Distribution Water Colour	158	5 TCU (AO)	< 2 – < 4 TCU
Distribution Water Conductivity	158	300 – 500 uS/cm	120 – 174 uS/cm
Distribution Water pH	158	6.5 – 8.5 (OG)	6.88 – 8.14
Distribution Water Total Dissolved Solids	158	500 mg/L (AO)	50 – 130 mg/L
Distribution Water Hardness	158	80 – 100 mg/L (OG)	12 – 31 mg/L

### Summary of Additional Samples:

Reason	Date of Issuance	Parameter	Date Sampled	Result
MDWL # 199-101, Issue 2	July 5, 2016	Backwash Effluent Suspended Solids	5-Jan-16	4.0 mg/L
			14-Apr-16	< 3.0 mg/L
			25-Jul-16	4.0 mg/L
			5-Oct-16	< 2.0 mg/L*

\*The annual average for Backwash Effluent Suspended Solids is 3.25 mg/L, which is below the limit of 25 mg/L.

### Summary of Inorganic Parameters Tested or Most Recent Sample Results:

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

(INSERTED ON THE NEXT PAGES)

### Summary of Organic Parameters Tested or Most Recent Sample Results:

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

(INSERTED ON THE NEXT PAGES)

Drinking-Water System Number: 210002101  
 Drinking-Water System Name: PETAWAWA DRINKING WATER SYSTEM  
 Drinking-Water System Owner: Title Holder: Municipality  
 Drinking-Water System Category: Large Municipal Residential  
 Period being reported: 01/2016 12/2016

Table 4

Summary of inorganic parameters tested during this reporting period or the most recent sample results

TREATED WATER	Sample Date (mm/dd/yyyy)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Antimony: Sb (ug/L) - TW	2016/01/11	<MDL 0.5	6.0	No	No
Arsenic: As (ug/L) - TW	2016/01/11	<MDL 1.0	25.0	No	No
Barium: Ba (ug/L) - TW	2016/01/11	<MDL 10.0	1000.0	No	No
Boron: B (ug/L) - TW	2016/01/11	<MDL 10.0	5000.0	No	No
Cadmium: Cd (ug/L) - TW	2016/01/11	<MDL 0.1	5.0	No	No
Chromium: Cr (ug/L) - TW	2016/01/11	<MDL 1.0	50.0	No	No
Mercury: Hg (ug/L) - TW	2016/01/11	<MDL 0.1	1.0	No	No
Selenium: Se (ug/L) - TW	2016/01/11	<MDL 1.0	10.0	No	No
Uranium: U (ug/L) - TW	2016/01/11	<MDL 1.0	20.0	No	No

Additional Inorganics

Fluoride (mg/L) - TW	2016/12/28	0.44	1.5	No	No
Nitrite (mg/L) - TW	2016/01/04	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2016/04/04	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2016/07/05	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	2016/10/03	<MDL 0.1	1.0	No	No
Nitrate (mg/L) - TW	2016/01/04	0.19	10.0	No	No
Nitrate (mg/L) - TW	2016/04/04	0.2	10.0	No	No
Nitrate (mg/L) - TW	2016/07/05	0.15	10.0	No	No
Nitrate (mg/L) - TW	2016/10/03	0.18	10.0	No	No
Sodium: Na (mg/L) - TW	2014/02/10	20.0	20*	No	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.

Drinking-Water System Number: 210002101  
 Drinking-Water System Name: PETAWAWA DRINKING WATER SYSTEM  
 Drinking-Water System Owner: Title Holder: Municipality  
 Drinking-Water System Category: Large Municipal Residential  
 Period being reported: 01/2016 12/2016

**Table 6**  
**Summary of Organic parameters sampled during this reporting period or the most recent sample results**

TREATED WATER	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Alachlor (ug/L) - TW	2016/01/11	<MDL 0.5	5.00	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2016/01/11	<MDL 0.2	5.00	No	No
Azinphos-methyl (ug/L) - TW	2016/01/11	<MDL 2.0	20.00	No	No
Benzene (ug/L) - TW	2016/01/11	<MDL 0.5	1.00	No	No
Benzo(a)pyrene (ug/L) - TW	2016/01/11	<MDL 0.01	0.01	No	Yes
Bromoxynil (ug/L) - TW	2016/01/11	<MDL 0.5	5.00	No	No
Carbaryl (ug/L) - TW	2016/01/11	<MDL 5.0	90.00	No	No
Carbofuran (ug/L) - TW	2016/01/11	<MDL 5.0	90.00	No	No
Carbon Tetrachloride (ug/L) - TW	2016/01/11	<MDL 0.2	2.00	No	No
Chlorpyrifos (ug/L) - TW	2016/01/11	<MDL 1.0	90.00	No	No
Diazinon (ug/L) - TW	2016/01/11	<MDL 1.0	20.00	No	No
Dicamba (ug/L) - TW	2016/01/11	<MDL 1.0	120.00	No	No
1,2-Dichlorobenzene (ug/L) - TW	2016/01/11	<MDL 0.4	200.00	No	No
1,4-Dichlorobenzene (ug/L) - TW	2016/01/11	<MDL 0.4	5.00	No	No
1,2-Dichloroethane (ug/L) - TW	2016/01/11	<MDL 0.2	5.00	No	No
1,1-Dichloroethylene (ug/L) - TW	2016/01/11	<MDL 0.5	14.00	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW	2016/01/11	<MDL 4.0	50.00	No	No
2,4-Dichlorophenol (ug/L) - TW	2016/01/11	<MDL 0.5	900.00	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2016/01/11	<MDL 1.0	100.00	No	No
Diclofop-methyl (ug/L) - TW	2016/01/11	<MDL 0.9	9.00	No	No
Dimethoate (ug/L) - TW	2016/01/11	<MDL 2.5	20.00	No	No
Diquat (ug/L) - TW	2016/01/11	<MDL 5.0	70.00	No	No
Diuron (ug/L) - TW	2016/01/11	<MDL 10.0	150.00	No	No
Glyphosate (ug/L) - TW	2016/01/11	<MDL 10.0	280.00	No	No
Malathion (ug/L) - TW	2016/01/11	<MDL 5.0	190.00	No	No
Metolachlor (ug/L) - TW	2016/01/11	<MDL 1.0	50.00	No	No
Metribuzin (ug/L) - TW	2016/01/11	<MDL 5.0	80.00	No	No

Monochlorobenzene (Chlorobenzene) (ug/L) - TW	2016/01/11	<MDL 0.2	80.00	No	No
Paraquat (ug/L) - TW	2016/01/11	<MDL 1.0	10.00	No	No
PCB (ug/L) - TW	2016/01/11	<MDL 0.1	3.00	No	No
Pentachlorophenol (ug/L) - TW	2016/01/11	<MDL 0.5	60.00	No	No
Phorate (ug/L) - TW	2016/01/11	<MDL 0.5	2.00	No	No
Picloram (ug/L) - TW	2016/01/11	<MDL 5.0	190.00	No	No
Prometryne (ug/L) - TW	2016/01/11	<MDL 0.25	1.00	No	No
Simazine (ug/L) - TW	2016/01/11	<MDL 1.0	10.00	No	No
Terbufos (ug/L) - TW	2016/01/11	<MDL 0.4	1.00	No	No
Tetrachloroethylene (ug/L) - TW	2016/01/11	<MDL 0.3	30.00	No	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2016/01/11	<MDL 0.5	100.00	No	No
Triallate (ug/L) - TW	2016/01/11	<MDL 1.0	230.00	No	No
Trichloroethylene (ug/L) - TW	2016/01/11	<MDL 0.3	50.00	No	No
2,4,6-Trichlorophenol (ug/L) - TW	2016/01/11	<MDL 0.5	5.00	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA)* (ug/L) - TW	2016/01/11	<MDL 1.0	100.00	No	No
Trifluralin (ug/L) - TW	2016/01/11	<MDL 1.0	45.00	No	No
Vinyl Chloride (ug/L) - TW	2016/01/11	<MDL 0.2	1.00	No	No
DISTRIBUTION WATER					
Trihalomethane: Total (ug/L) Annual Average - DW	2016/01/01	55.75	100.00	No	Yes

\*As of January 1st, 2017 this parameter will be added as a chemical standard to Schedule 2 with a MAC of 0.1 mg/L

**Summary of Community Lead Sampling Program:** (Ont. Reg. 169/03 Standard = 10 ug/L or 0.01 mg/L (MAC):

**Reduced Sampling:** Distribution Samples Only Required (Dec 15th-Apr 15th & Jun 15th-Oct 15<sup>th</sup> annually): Taken from 4 hydrants for Petawawa DWS.

**Distribution Samples-**

Date Sampled	pH Results		Alkalinity Results		Cl2 Results	
	Max Result	Min Result	Max Result	Min Result	Max Result	Min Result
11-Apr-16	6.74	6.68	34	32	1.05	0.68
19-Sept-16	6.90	6.78	41	33	0.66	0.49

**2016 Facility Work Order Status:**

Preventative Work Orders Completed	55
Operational Work Orders Completed	42
Call Back Work Orders Completed	13
Capital Work Orders Completed	21
Corrective Work Orders Completed	38

**2016 Maintenance Summary:**

**Brief Description - Summary of Expenses Incurred for Installations, Repairs or Replacements for Capital Projects:**

- Intake inspections.
- High lift pump - check valve solenoids, and soft start.
- Air compressor maintenance and repairs.
- Summer student labour costs.
- Water main break costs on Petawawa Blvd.
- Wolfe Street flow meter replacement.
- Water main replacement at booster station #1 on Petawawa Blvd.
- Service repair at 16 Lisa Street.
- Low lift pump repair.

- Maintenance parts for chlorine pump repair.
- Costs for floor stripping and waxing.
- Maintenance parts for analyzers.
- Costs for check valve seals for high lift pumps.
- Upgrades to the clear well.
- Miscellaneous capital items needed for repair and maintenance of the plant and equipment.

### Distribution Activities for 2016:

**Background:** OCWA is responsible for the operation of the water treatment plant, booster pumping stations (2), water storage facilities (3 towers), and the distribution system that OCWA assumed responsibility for on January 1st, 2011.

- Petawawa Water Treatment Plant is a Class 3 Facility.
- Petawawa Distribution System is a Class 1 System.

### Distribution Summary:

1. OCWA Operators attended to 1 water leak repair in 2016: At 2089 Petawawa Blvd.
2. Booster Pumping Stations are checked every week on Mondays and Thursdays. Towers are inspected twice weekly, as well.
3. Hydrant Flushing was performed on all (582) hydrants between May 16th – July 14<sup>th</sup>, 2016. Annual winterizing of hydrants was completed in November 8<sup>th</sup> -18<sup>th</sup>, 2016. All dead end hydrants were checked and flushed in May and November, 2016.
4. The Community Lead Sampling Program was conducted during the Winter Period of December 15<sup>th</sup>, 2015 to April 15<sup>th</sup>, 2016 and again during the Summer Period of June 15<sup>th</sup> to October 16<sup>th</sup>, 2016. See Summary of Community Lead Sampling above for results.
5. Water Service Inspections (including water turn on/offs, new home piping inspections, backflow preventer installations, charging/pressure and flow testing, locates, exercising valves, opening curb stops, assisting contractors, collecting bacti samples, etc.) were performed during 2016 on numerous homes, businesses and roads within the Town of Petawawa. These types of inspections to various locations within the Town, included such activities as: PLEASE SEE NEXT FIVE PAGES ATTACHED.

# Petawawa Distribution

## 2016

**January 5 – Flushed hydrant #448 behind Petawawa Plaza.**

**January 5 – Eastway Construction water main tie-in at Nick St. and Town Center Road.**

**January 7 – H&H Construction water main tie-in at Highland Crescent and Newport St.**

**January 7 – H&H Construction water main tie-in at Newport St. and Morning Star Crescent.**

**January 8 – Water turn on at 14,16,18 William Thomas Drive.**

**February 19 – Water turn on at 12 Dustin Drive.**

**March 1 – Inspect hydrant #49 at Willard St. and Mohns Avenue after fire department used.**

**March 8 – Do-All Construction re-locating hydrant #57 at new Mac's Milk at Limestone and Petawawa Blvd.**

**March 31 – Flush hydrant #448 behind Petawawa Plaza.**

**April 11 – Inspect hydrant #398 at Township Tower after fire department used.**

**April 12 – 5 New construction water & sewer inspections on Winston Avenue.**

**April 13 – 3 New construction water & sewer inspections on Winston Avenue.**

**April 13 – New construction water & sewer inspection on Newport St.**

**April 19 – New construction water & sewer inspection on Butler St.**

**April 19 – 2 New construction water & sewer inspections on Noble Crescent.**

**April 20 – New construction water & sewer inspection on Marquis Drive.**

**April 21 – New construction water & sewer inspection on Gardner Crescent.**

**April 22 – New construction water & sewer inspection on Gardner Crescent.**

**April 25 – New construction water & sewer inspection on Gardner Crescent.**

**April 26 – New construction water & sewer inspection on Gardner Crescent.**

**April 26 – New construction water & sewer inspection on Newport St.**

**April 27 – New construction water & sewer inspection on Dustin Drive.**

**April 29 – New construction water & sewer inspection on Oak St.**

**May 3 – Flush hydrant #44B behind Petawawa Plaza.**

**May 3 – New construction water & sewer inspection on Noble Crescent.**

**May 3 – New construction water & sewer inspection on Dustin Drive.**

**May 3 – New construction water & sewer inspection on Nick St.**

**May 5 – New construction water & sewer inspection on Dustin Drive.**

**May 5 – New construction water & sewer inspection on Newport St.**

**May 6 – H&H Construction raising 3 hydrants on Highland Crescent.**

**May 6 – Install backflow preventer and turn hydrant on at Civic Center Road for Civic Center staff.**

**May 10 – New construction water & sewer inspection on Dustin Drive.**

**May 11 – New construction water & sewer inspection on Dustin Drive.**

**May 12 – New construction water & sewer inspection on Garner Crescent.**

**May 16 – New construction water & sewer inspection on Gardner Crescent.**

**May 16 to July 14 – Spring hydrant flushing program (all hydrants)**

**May 19 – New construction water & sewer inspection on Nick St.**

**May 25 – New construction water inspection on Sack Road.**

**May 31 – New construction water & sewer inspection on Dustin Drive.**

**June 1 – New construction water & sewer inspection on Newport St,**



**June 1 – New construction water & sewer inspection on Liam St.**

**June 2 – New Construction water & sewer inspection on Liam St.**

**June 3 – RGT Clouthiers at new Tim Hortons on Town Center Road to tie-in new service lines and water main connection.**

**June 3 – New construction water & sewer inspection on Nick St.**

**June 8 – 2 New construction water & sewer inspections on Chad St.**

**June 9 – 4 New construction water & sewer inspections on Chad St.**

**June 10 – H&H construction at Portage Road subdivision for live tap, flushing and sampling.**

**June 10 – New construction water & sewer inspection on Oak St.**

**June 14 – New construction water & sewer inspection on Newport St.**

**June 14 – 3 New construction water & sewer inspections on McNamara St.**

**June 15 – New construction water & sewer inspection on Dustin Drive.**

**June 17 – New construction water & sewer inspection on Gardner Crescent.**

**June 23 – Water service line repair on easement off Boulder Creek St.**

**June 24 – New construction water & sewer inspection on Newport St.**

**June 29 – New construction water & sewer inspection on Laurentian Drive.**

**July 5 – H&H on Civic Center Road installing new water main from Dairy Queen to Highland Crescent.**

**July 5 – H&H at Portage Road new subdivision doing water main tie-in and water line flushing.**

**July 6 – RGT Clouthiers at 2089 Petawawa Blvd. for water main leak repair.**

**July 12 – Flush hydrant 44B behind Petawawa Plaza.**

**July 19 – New construction water & sewer inspection on Newport St,**

**July 20 – New construction water & sewer inspection on Wilson Avenue.**

**July 21 – New construction water turn on at 15 East St.**

**July 22 – New construction water & sewer inspection on Noble Crescent.**

**July 22 – New construction water & sewer inspection on Dustin Drive.**

**August 4 – H&H at Civic Center Road to do live tap on water main for filling and sampling new water main extension.**

**August 3 – New construction water & sewer inspection on Newport St.**

**August 9 – New construction water turn on at 13 Newport St.**

**August 11 – New construction water & sewer inspection on Liam St.**

**August 16 – New construction water & sewer inspection on Oak St.**

**August 16 – New construction water & sewer inspection on Liam St.**

**August 16 – H&H construction on Civic Center Road to re-locate hydrant back 15 feet.**

**August 16 – Flushing new water main to begin water sampling.**

**August 22 – H&H on Civic Center Road to tie-in the two new water main ends.**

**August 29 – Flush Town Center Road water line dead end.**

**August 29 – Flush Dustin Drive water main dead end.**

**August 29 – New construction water & sewer inspection on Newport St.**

**August 30 – 4 New construction water & sewer inspections on Chad St.**

**August 31 – 2 New construction water & sewer inspections on Chad St.**

**August 31 – Begin water main valve exercising and stopped October 4 .**

**September 14 – New construction water & sewer inspection on Newport St.**

**October 4 – New construction water & sewer inspection on Newport St.**

**October 18 – 2 New construction water & sewer inspection on Marquis Drive.**

**October 21 – New construction water & sewer inspection on East St.**

**October 21- 2 New construction water & sewer inspections on Marquis Drive.**

**October 25 – 2 New construction water & sewer inspections on Liam St.**

**November 2 – New construction water & sewer inspection on Petawawa Blvd.**

**November 14 – New construction water & sewer inspection on Gardner Crescent.**

**November 16 – New construction water & sewer inspection on Dustin Drive.**

**November 9 to November 15 – Dead end hydrant flushing.**

**November 8 to November 18 – Hydrant Pumping and installing hydrant antifreeze.**

**November 17 – RGT Clouthiers doing two water main tie-ins, one at Black Bay Road and Carla St. and one at Black Bay Road and Industrial Road.**

**November 17 – RGT Clouthier doing a 6" live tap and a 1" live at new storage lockers on Industrial Road.**

**November 18 – New construction water & sewer inspection on Black Bay Road.**

**November 30 – New construction water & sewer inspection on Dustin Drive.**

**December 5 – New construction water turn on at 74 Oak St.**

**December 8 – Hydrant repair at dead end of Sammy Drive.**

**December 12 – New construction water turn on at 76 Oak St.**

# **SUMMARY REPORT**

**2016**

# PETAWAWA DRINKING WATER SYSTEM

## 2016 SUMMARY REPORTS FOR MUNICIPALITIES

### Report:

This report is a summary of water quality information for the Petawawa Drinking Water System, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1, 2016 to December 31, 2016. The Petawawa Drinking Water System is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by the Ontario Clean Water Agency on behalf of the Town of Petawawa.

### Who gets a copy of the Report?

- in the case of a drinking-water system owned by a municipality, the members of the municipal council;

### What must the Report contain?

The report must,

- (a) list the requirements of the Act, the regulations, the system's approval and any order that the system **failed to meet** at any time during the period covered by the report and specify the duration of the failure; and
- (b) for each failure referred to in clause (a) describe the measures that were taken to correct the failure.

The following table lists the requirements that the system failed to meet and the measures taken to correct the failure:

Drinking Water Legislation	AWQI #	List the requirement(s) the system failed to meet	Specify the duration of the failure (i.e. date(s))	Describe the measures taken to correct the failure	Status (complete or outstanding)
SDWA 170/03	128334	Loss of Trending for the BPS #1 & BPS #2& Township Tower	Feb. 22/16	Re-started main SCADA computer and trending restored.	Completed

### 2015 – 2016 Petawawa DWS MOECC Inspection:

The Ministry of Environment conducted their annual site visit for the 2015-2016 reporting year on March 3rd, 2016. The MOECC Drinking Water Inspector had no 'Actions Required' or 'BMP/Recommended Actions' identified in the inspection report.

The final report was received on March 22, 2016 with an Inspection Rating of 100%.

# PETAWAWA DRINKING WATER SYSTEM

## 2016 SUMMARY REPORTS FOR MUNICIPALITIES

### Summary of Community Complaints/Service Forms for 2016:

Please refer to next attached Table – Compliance Incident Details, for the Petawawa DWS Summary of Community Complaints.

### What else must the Report contain?

The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system:

1. Summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water licence.

### Capacity Assessment of the Petawawa Drinking Water System:

<b>Year</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Av. Day Flow (m <sup>3</sup> /d)	7 159.3	6 463.48	6 162.13	5 916.25	5 876.01
Design Capacity (m <sup>3</sup> /d)	21 500.0	21 500.0	21 500.0	21 500.0	21 500.0
<b>% of Capacity</b> (based on av. day flows)	33.3	30.1	28.7	27.5	27.3
Max. Day Flow (m <sup>3</sup> /d)	13 860.0	11 664.0	12 037.0	9 922.0	12 559.0
<b>% of Capacity</b> (based on max. day flows)	64.5	54.3	56.0	46.1	58.4

In 2016, the average day flow was at approximately 27.3 % of the current plant design, and the maximum day flow was at approximately 58.4 % of the plant design of 21 500.0 m<sup>3</sup>/d.

Attached is a copy of the Facility Flow Summary for the Petawawa Drinking Water System. This document contains all required flow information. Also, attached is the confirmation for the submission into the MOECC WTRS for the 2016 reporting period.

### When Does the Report Get Submitted?

If a report is prepared for a system that supplies water to a municipality under the terms of a contract, the owner of the system shall give a copy of the report to the municipality by March 31st.

ID	Location	Authority	Status	Date of Incident	Date of Resolution	Problem	Report#	Details	Corrective Action Taken
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## Petawawa DWS

<b>AWQI</b>									
738	plant	MOE	Complete	22-Feb-2016	22-Feb-2016	Triending		Loss of trending for BPS #1, BPS #2, and Township Tower.	investigated
<b>Community Complaint</b>									
732	522 Turning Stone Cr	MOE	Complete	02-Feb-2016	02-Feb-2016	Community Complaint		Low water pressure complaint	investigated
731	12 Elmer Avenue	MOE	Complete	01-Feb-2016	01-Feb-2016	Community Complaint		Resident concerned with the cloudy, white colour of water.	investigated
737	22 Wilbert Street	MOE	Complete	03-Aug-2016	03-Aug-2016	Community Complaint		Low water pressure when running more than one sprinkler at a time.	investigated
736	13 Concord Street	MOE	Complete	06-Jul-2016	07-Jul-2016	Community Complaint		Low water pressure complaint. An irrigation system was being installed and contractor's didn't think it would function properly because of this.	investigated
735	9 Algonquin Street	MOE	Complete	05-Apr-2016	05-Apr-2016	Community Complaint		Low water pressure complaint.	investigated
734	34 Sunset Crescent	MOE	Complete	04-Apr-2016	04-Apr-2016	Community Complaint		Resident wanted OCWA to check the water pressure at the house. He thought the PRV maybe failing, as he just switched from electric to gas HWT.	investigated

ID	Location	Authority	Status	Date of Incident	Date of Resolution	Problem	Report#	Details	Corrective Action Taken
733	21 Albert Street	MOE	Complete	31-Mar-2016	14-Apr-2016	Community Complaint		Resident complained of brown coloured water.	investigated
728	278 Carla Street	MOE	Complete	22-Jan-2016	22-Jan-2016	Community Complaint		Resident get high water pressure spikes that usually happen in the winter. He has replace his HWT and has to empty a bucket every week from the blowoff. Usually the shower head will leak with the high pressure.	investigated
699	110 Hemlock Street	MOE	Complete	17-Nov-2015	17-Nov-2015	Community Complaint		Resident complained of low water pressure at her house.	investigated
698	90 Oak Avenue	MOE	Complete	16-Nov-2015	16-Nov-2015	Community Complaint		Resident complained of no water pressure at her house.	investigated





**ANNUAL WATER TAKING AND TRANSFER  
REPORT - SUBMITTED DATA TO MOECC,  
FOR THE YEAR OF 2016**

## Brenda Royce

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**From:** WTRS Helpdesk [WTRSHelpdesk@ontario.ca]  
**Sent:** February-16-17 9:52 AM  
**To:** Brenda Royce  
**Subject:** RE: Uploading xml file to system

Hello Brenda

Below is your 2016 submission confirmation for PTTW 3814-9J2RQN



Ministry of the Environment  
and Climate Change

[WT DATA](#) | [REPORTS](#) | [SEARCH WT DATA](#) | [ADMINISTRATION](#) | [USER PROFILE](#) | [CONTACT US](#) | [HELP](#) | [HOME](#) | [LOGOUT](#)

Location: [WTRS / WT DATA / Input WT Record](#)

WTR:

**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 16, 2017 9:51 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.

Thank you  
Helen D'Apice

-----Original Message-----

**From:** Brenda Royce [<mailto:BRoyce@ocwa.com>]  
**Sent:** February 16, 2017 9:49 AM  
**To:** WTRS Helpdesk  
**Subject:** Uploading xml file to system

Good Morning,

I am having trouble uploading my xml file to the WTRS for Petawawa DWS. As with every year, the system tells me that the river is not a proper source. Could you please try uploading it for me. Thanks and have a great day.

Brenda Royce  
Process & Compliance Technician  
Ontario Clean Water Agency  
Laurentian View Cluster

**Ontario Clean Water Agency**  
**Annual Water Taking and Transfer Report**  
From 01/01/2016 To 12/31/2016

Facility: PETAWAWA DRINKING WATER SYSTEM-5710  
Tag: Raw Flow: Sum (m3/d)  
Tag Group: Raw Water

Permit#: 3814-9J2RQN  
Source Name: ALLUMETTE LAKE (OTTAWA RIVER)  
Source: SURFACE  
Type: RIVER/  
Purpose: Municipal

Coordinate Zone: 18  
Easting: 322258  
Northing: 5088033  
Method deter: Metered

Date Measured	Value (m³/d)	Value (Litres)
01/01/2016	4939.0000	4939000.0000
02/01/2016	4743.0000	4743000.0000
03/01/2016	5054.0000	5054000.0000
04/01/2016	5287.0000	5287000.0000
05/01/2016	5057.0000	5057000.0000
06/01/2016	6111.0000	6111000.0000
07/01/2016	4303.0000	4303000.0000
08/01/2016	5798.0000	5798000.0000
09/01/2016	4968.0000	4968000.0000
10/01/2016	4004.0000	4004000.0000
11/01/2016	4921.0000	4921000.0000
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13/01/2016	4427.0000	4427000.0000
14/01/2016	5104.0000	5104000.0000
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17/01/2016	4503.0000	4503000.0000
18/01/2016	4723.0000	4723000.0000
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21/01/2016	4560.0000	4560000.0000
22/01/2016	4595.0000	4595000.0000
23/01/2016	4492.0000	4492000.0000
24/01/2016	4924.0000	4924000.0000
25/01/2016	4554.0000	4554000.0000
26/01/2016	4148.0000	4148000.0000
27/01/2016	3235.0000	3235000.0000
28/01/2016	4353.0000	4353000.0000
29/01/2016	4778.0000	4778000.0000
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31/01/2016	3738.0000	3738000.0000
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21/08/2016	6551.0000	6551000.0000
22/08/2016	5816.0000	5816000.0000
23/08/2016	6450.0000	6450000.0000
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25/08/2016	7356.0000	7356000.0000
26/08/2016	7424.0000	7424000.0000
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28/08/2016	6530.0000	6530000.0000
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31/08/2016	6825.0000	6825000.0000
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03/09/2016	6283.0000	6283000.0000
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05/09/2016	6380.0000	6380000.0000
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07/09/2016	7809.0000	7809000.0000
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28/09/2016	6309.0000	6309000.0000
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02/10/2016	5880.0000	5880000.0000
03/10/2016	6293.0000	6293000.0000
04/10/2016	5777.0000	5777000.0000
05/10/2016	5939.0000	5939000.0000
06/10/2016	6524.0000	6524000.0000
07/10/2016	6065.0000	6065000.0000
08/10/2016	6195.0000	6195000.0000



09/10/2016	5287.0000	5287000.0000
10/10/2016	5891.0000	5891000.0000
11/10/2016	5837.0000	5837000.0000
12/10/2016	6063.0000	6063000.0000
13/10/2016	6127.0000	6127000.0000
14/10/2016	5836.0000	5836000.0000
15/10/2016	4974.0000	4974000.0000
16/10/2016	5658.0000	5658000.0000
17/10/2016	5615.0000	5615000.0000
18/10/2016	5929.0000	5929000.0000
19/10/2016	5853.0000	5853000.0000
20/10/2016	5527.0000	5527000.0000
21/10/2016	5590.0000	5590000.0000
22/10/2016	5433.0000	5433000.0000
23/10/2016	5363.0000	5363000.0000
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25/10/2016	5177.0000	5177000.0000
26/10/2016	5675.0000	5675000.0000
27/10/2016	5596.0000	5596000.0000
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29/10/2016	5169.0000	5169000.0000
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02/11/2016	5501.0000	5501000.0000
03/11/2016	5612.0000	5612000.0000
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05/11/2016	5019.0000	5019000.0000
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07/11/2016	4570.0000	4570000.0000
08/11/2016	3937.0000	3937000.0000
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15/11/2016	5863.0000	5863000.0000
16/11/2016	5724.0000	5724000.0000
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21/11/2016	5920.0000	5920000.0000
22/11/2016	5517.0000	5517000.0000
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06/12/2016	5663.0000	5663000.0000
07/12/2016	5678.0000	5678000.0000

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09/12/2016	5509.0000	5509000.0000
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13/12/2016	5951.0000	5951000.0000
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16/12/2016	5416.0000	5416000.0000
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21/12/2016	5130.0000	5130000.0000
22/12/2016	4819.0000	4819000.0000
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25/12/2016	5064.0000	5064000.0000
26/12/2016	4982.0000	4982000.0000
27/12/2016	4967.0000	4967000.0000
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29/12/2016	4879.0000	4879000.0000
30/12/2016	4946.0000	4946000.0000
31/12/2016	5507.0000	5507000.0000