



**PETAWAWA DRINKING WATER SYSTEM
2010 ANNUAL REPORT**

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04/02/2011**



**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, SDWA, 2002- Water Taking and Transfer.

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.

SUMMARY REPORT

2010

**PETAWAWA DRINKING WATER SYSTEM
2010 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, 2010 to December 31, 2010. 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 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,

- 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
- 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	94283 & 94406	4 th quarter annual running average (THM total- 126 ug/L, THM average- 104 ug/L)	12-Apr-10 to 20-Apr-10	Re-sampled on April 12, 2010 and results were TTHM- 78.2 ug/L & running average of 104 ug/L. No further action required as per instructions from local Health Unit.	Completed
SDWA 170/03	95901	Distribution Total Coliform – TC result of 13 from Ultramar on Petawawa Blvd.	07-Jul-10 to 13-Jul-10	Re-sampled and sent for testing on July 7th, 2010. Results from re-samples received on July 13 th , 2010 showed water quality was no longer adverse. No further action required.	Completed

**PETAWAWA DRINKING WATER SYSTEM
2010 SUMMARY REPORTS FOR MUNICIPALITIES**

SDWA 170/03	97890	Distribution Total Coliform – TC result of 20 from Town Office on Victoria Street	07-Sept-10 to 15-Sept-10	Flushed main and re-sampled and sent for testing on Sept. 9, 2010. Results from re-samples received on Sept. 14 th , 2010 showed water quality was no longer adverse. No further action required.	Completed
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The Ministry of Environment 2010 inspection report noted the following:

Item #	Item	Action Taken to Address Item	Current Status (Complete, In progress)
The Ministry of Environment conducted their annual site visit for the 2010 reporting year on November 10th, 2010. The MOE Drinking Water Inspector returned on January 27 th , 2011 to take water samples and to interview Town Public Works staff. As of today, February 11 th , 2011, we have not received the Draft Report.			

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 and daily instantaneous peak flow rates.
2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval.

Attached is a copy of the Annual Record of Water Taking for the Petawawa Drinking Water System. This document contains all required flow information.

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 31.

Annual Record Of Surface Water Taking
 Relevé annuel des prises d'eau de surface

Personal information contained on this form is collected under the authority of the Ontario Water Resources Act, Section 20. The Purpose of the form is to record details and information about the taking of water annually. Questions should be directed to the respective hub office in your area.

Les renseignements personnels qui figurent dans le présent formulaire sont recueillis en vertu de l'article 20 de la Loi sur les ressources en eau de l'Ontario. Ce formulaire sert à classer les détails et les renseignements concernant la prise d'eau annuelle. Prière d'adresser toutes questions au personnel du bureau régional de votre secteur.

Year(Année): 2010 Permit No.(N° de permis): E135-SZDPPS Source: Alburnetts Lake (Ottawa River)

Name of Permittee: Mailing Address:
 Nom du titulaire du permis Adresse postale

Location Of Taking: Twp. or Municipality: Concession: Lot
 Lieu de la prise d'eau Canton ou municipalité Town of Pelham

	Jan/2010	Feb/2010	Mar/2010	Apr/2010	May/2010	Jun/2010	Jul/2010	Aug/2010	Sep/2010	Oct/2010	Nov/2010	Dec/2010	← Total →	← Avg. →	← Max. →	← Criteria →
Total Hours of Taking	874.0	881.0	878.0	891.0	900.0	898.8	724.0	883.0	888.0	488.0	488.0	888.0	8,015.0	488.75		
Avg Daily Taking(m3)	8,772.0	8,481.48	8,441.58	8,707.73	7,881.48	7,344.2	8,914.88	7,878.84	8,880.8	8,785.88	8,848.88	8,788.88		8,488.88		21,800.0
Total Amt of Taking(m3)	178,888.0	188,841.0	188,888.8	171,888.8	388,488.0	217,888.0	287,748.8	244,878.0	308,888.0	177,808.0	178,881.0	178,788.0	2,870,888.8			
Max Daily Flow(m3)	8,888.8	8,888.0	8,878.0	8,888.8	11,888.0	8,188.8	13,118.8	18,888.8	18,888.8	7,888.8	8,888.8	8,888.8			18,118.0	21,800.0
Avg Daily Rate of Taking(L/sec)	88.81	88.1	88.88	88.88	88.88	88.88	88.88	88.88	88.88	88.88	88.88	88.88		78.17		
Peak Daily Rate of Taking(L/sec)	148.8	148.87	148.88	148.88	281.88	224.88	280.07	288.87	288.18	288.1	288.18	288.87			288.1	248.84
Peak Daily Rate of Taking(L/min)	8,918.0	8,936.0	8,718.0	12,881.0	18,888.0	18,488.0	18,888.0	18,888.0	18,888.0	14,888.0	18,888.0	18,488.0			14,888.0	14,888.0

SECTION 11

ANNUAL REPORT 2010



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

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

System Information

Drinking Water System Name	Petawawa Drinking Water System
Drinking Water System Number	210002101
System Owner	Town of Petawawa
Operating Authority	Ontario Clean Water Agency
Drinking Water System Category	Large Municipal Residential
Reporting Period	January 1, 2010 – December 31, 2010

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

Town of Petawawa
1111 Victoria Street
Petawawa, ON
K8H 2E6

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 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.

What Treatment Chemicals were used during the Reporting Year:

Chemical Name	Use	Supplier
PAS-8	Coagulant	Kemira
Fluoride	Fluoridation	Mid-Chem Canada Ltd.
Soda Ash Dense	pH Adjustment	Quadra & CCC
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 #	PARAMETER/EQUIPMENT FAILURE	Cause		CORRECTIVE ACTION TAKEN	STATUS
			DURATION			
SDWA 170/03	94283 & 94406	4 th quarter annual running average (THM total- 126 ug/L, THM average- 104 ug/L)	12-Apr-10 to 20-Apr-10		Re-sampled on April 12, 2010 and results were TTHM- 78.2 ug/L & running average of 104 ug/L. No further action required as per instructions from local Health Unit.	Completed
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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

Regulatory Sample Results Summary-

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	53	0-10	53	0-25	1	38
Treated	52	0-0	52	0-0	52	0-21
Distribution	321	0-0	321	0-500	321	0-106

Operational Testing (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 – 1.58 NTU
Filter #2 Turbidity	1 NTU	0 – 2.05 NTU
Filter #3 Turbidity	1 NTU	0 – 2.05 NTU
Treated Free Chlorine	0.05 mg/L – 4 mg/L	0.76 – 2.12 mg/L*
Distribution Free Chlorine**	0.2 mg/L – 4.0 mg/L	0 – 5.11 mg/L*
Fluoride	1.5 mg/L***	0 – 1.15 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 (4) 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	106	0.05 mg/L – 4.0 mg/L	1.08 – 1.87 mg/L
Treated Water Fluoride	108	1.5 mg/L	0.41 – 0.92 mg/L
Treated Water Turbidity	103	1 NTU	0.075 – 0.219 NTU
Treated Water Alkalinity	103	30 – 500 mg/L (OG)*	20 – 39 mg/L
Treated Water Aluminum	103	0.1 mg/L (OG)	0 – 0.036 mg/L
Treated Water Colour	103	5 TCU (AO)**	0 – 2.0 TCU
Treated Water pH	105	6.5 – 8.5 (OG)	6.52 – 7.79

Distribution Free Chlorine	804	0.2 mg/L – 4.0 mg/L	0.01 – 1.92 mg/L
Filter #1 Turbidity	102	1 NTU	0.069 – 0.241 NTU
Filter #2 Turbidity	102	1 NTU	0.069 – 0.346 NTU
Filter #3 Turbidity	100	1 NTU	0.068 – 0.376 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, MOE 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	54	30 – 500 mg/L (OG)	23 – 42 mg/L
Treated Water Colour	54	5 TCU (AO)	1 – 4 TCU
Treated Water Conductivity	52	300 – 500 uS/cm	123 – 162 uS/cm
Treated Water pH	52	6.5 – 8.5 (OG)	6.94 – 7.75
Treated Water Total Dissolved Solids	52	500 mg/L (AO)	80 – 105 mg/L
Treated Water Hardness	52	80 – 100 mg/L (OG)	14 – 32 mg/L
Treated Water Fluoride	54	1.5 mg/L	0.1 – 0.66 mg/L
Distribution Water Alkalinity	156	30 – 500 mg/L (OG)	24 – 42 mg/L
Distribution Water Colour	156	5 TCU (AO)	2.0 – 6.0 TCU
Distribution Water Conductivity	156	300 – 500 uS/cm	127.0 – 168.0 uS/cm
Distribution Water pH	156	6.5 – 8.5 (OG)	7.01 – 7.92
Distribution Water Total Dissolved Solids	156	500 mg/L (AO)	83.0 – 110.0 mg/L
Distribution Water Hardness	156	80 – 100 mg/L (OG)	14.0 – 31.0 mg/L

Summary of Additional Samples:

Reason	Date of Issuance/Complaint	Parameter	Date Sampled	Result
Certificate of Approval # 7373-7H2K93	30-Sep-08	Backwash Effluent Suspended Solids	11-Jan-10	4.0 mg/L
			6-Apr-10	9.0 mg/L
			07-Jul-10	7.0 mg/L
			15-Oct-10	4.0 mg/L*

*The annual average for Backwash Effluent Suspended Solids is 6.0 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

Parameter	Sample Date	Result	Ont. Reg. 169/03 Standard (MAC)	Exceedence of MAC	Exceedence of 1/2 MAC
Antimony	Jan 11/10	< 0.1 ug/L	6 ug/L	No	No
Arsenic	Jan 11/10	< 1.0 ug/L	25 ug/L	No	No
Barium	Jan 11/10	< 10.0 ug/L	1000 ug/L	No	No
Boron	Jan 11/10	< 10.0 ug/L	5000 ug/L	No	No
Cadmium	Jan 11/10	< 0.1 ug/L	5 ug/L	No	No
Chromium	Jan 11/10	1.0 ug/L	50 ug/L	No	No
Mercury	Jan 11/10	< 0.1 ug/L	1 ug/L	No	No
Selenium	Jan 11/10	< 1.0 ug/L	10 ug/L	No	No
Sodium	Jan 11/10	20 mg/L	20 mg/L	No	Yes*
Uranium	Jan 11/10	< 1.0 ug/L	20 ug/L	No	No
Fluoride Residual: Mean	Dec 29/10	< 0.1 mg/L	1.5 mg/L	No	No
1 st Quarter Nitrite	Jan 11/10	< 0.1 mg/L	1 mg/L	No	No
2 nd Quarter Nitrite	Apr 6/10	< 0.1 mg/L	1 mg/L	No	No
3 rd Quarter Nitrite	Jul 5/10	< 0.1 mg/L	1 mg/L	No	No
4 th Quarter Nitrite	Oct 4/10	< 0.1 mg/L	1 mg/L	No	No
1 st Quarter Nitrate	Jan 11/10	0.18 mg/L	10 mg/L	No	No
2 nd Quarter Nitrate	Apr 6/10	0.25 mg/L	10 mg/L	No	No
3 rd Quarter Nitrate	Jul 5/10	0.12 mg/L	10 mg/L	No	No
4 th Quarter Nitrate	Oct 4/10	0.16 mg/L	10 mg/L	No	No

*Sodium is required to be tested every 60 months. The local Medical Officer of Health is notified when the sodium concentration exceeds 20 mg/L, so this information may be passed on to local physicians for their use with patients on sodium restricted diets. The aesthetic objective for sodium in drinking water is 200mg/L at which it can be detected by a salty taste (taken from the Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, June 2006, MOE P1BS 4449e01).

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

Round #3 – December 15/08 to April 15/09

Residential Samples-

# of Samples	# Adverse (>0.01 mg/L)	# Exceed 1/2 MAC (0.005 mg/L)	Lead Sample #1		Lead Sample #2		pH	
			Max Result (mg/L)	Min Result (mg/L)	Max Result (mg/L)	Min Result (mg/L)		
60	0	1	0.005	< 0.001	0.003	< 0.001	7.83	7.05

Non-Residential Samples-

# of Samples	# Adverse (> 0.01 mg/L)	# Exceed 1/2 MAC (0.005 mg/L)	Lead Sample #1		Lead Sample #2		pH	
			Max Result (mg/L)	Min Result (mg/L)	Max Result (mg/L)	Min Result (mg/L)		
6	0	0	0.004	< 0.001	0.004	< 0.001	7.62	7.37

Distribution Samples-

# of Samples	# Adverse (> 0.01 mg/L)	# Exceed 1/2 MAC (0.005 mg/L)	Lead Sample #1		pH		Alkalinity	
			Max Result (mg/L)	Min Result (mg/L)	Max Result	Min Result	Max Result	Min Result
12	0	0	0.002	< 0.001	7.63	7.27	34	27

Summary of Lead Sampling:

Round #4 – June 15/09 to October 15/09

Residential Samples-

# of Samples	# Adverse (> 0.01 mg/L)	# Exceed 1/2 MAC (0.005 mg/L)	Lead Sample #1		Lead Sample #2		pH	
			Max Result (mg/L)	Min Result (mg/L)	Max Result (mg/L)	Min Result (mg/L)	Max Result	Min Result
60	0	0	0.004	< 0.001	0.002	< 0.001	7.52	6.94

Non-Residential Samples-

# of Samples	# Adverse (> 0.01 mg/L)	# Exceed 1/2 MAC (0.005 mg/L)	Lead Sample #1		Lead Sample #2		pH	
			Max Result (mg/L)	Min Result (mg/L)	Max Result (mg/L)	Min Result (mg/L)	Max Result	Min Result
6	0	1	0.005	< 0.001	0.004	< 0.001	7.24	7.07

Distribution Samples-

# of Samples	# Adverse (> 0.01 mg/L)	# Exceed 1/2 MAC (0.005 mg/L)	Lead Sample #1		pH		Alkalinity	
			Max Result (mg/L)	Min Result (mg/L)	Max Result	Min Result	Max Result	Min Result
12	0	0	0.003	< 0.001	7.28	7.09	40	38

Summary of Lead Sampling:

Reduced Sampling- next round for the Town of Petawawa will be from December 15, 2011 to April 15, 2012 and from June 15, 2012 to October 15, 2012.

Summary of Organic Parameters Tested or Most Recent Result:
MAC = Maximum Allowable Concentration as per O. Reg. 169/03

Parameter	Sample Date	Result (ug/L)	Ont. Reg. 169/03 Standard (MAC)	Exceedence of MAC	Exceedence of 1/2 MAC
Alachlor	Jan 11, 2010	< 0.5	5 ug/L	No	No
Aldicarb	Jan 11, 2010	< 5.0	9 ug/L	No	No
Aldrin + Dieldrin	Jan 11, 2010	< 0.01	0.7 ug/L	No	No
Atrazine + N-Dealkylated metabolites	Jan 11, 2010	< 0.2	5 ug/L	No	No
Azinphos-methyl	Jan 11, 2010	< 2.0	20 ug/L	No	No
Bendiocarb	Jan 11, 2010	< 2.0	40 ug/L	No	No
Benzene	Jan 11, 2010	< 0.5	5 ug/L	No	No
Benzo(a)pyrene	Jan 11, 2010	< 0.01	0.01 ug/L	No	No
Bromoxynil	Jan 11, 2010	< 0.5	5 ug/L	No	No
Carbaryl	Jan 11, 2010	< 5.0	90 ug/L	No	No
Carbofuran	Jan 11, 2010	< 5.0	90 ug/L	No	No
Carbon Tetrachloride	Jan 11, 2010	< 0.5	5 ug/L	No	No
Chlordane (Total)	Jan 11, 2010	< 0.02	7 ug/L	No	No
Chlorpyrifos	Jan 11, 2010	< 1.0	90 ug/L	No	No
Cyanazine	Jan 11, 2010	< 1.0	10 ug/L	No	No
Diazinon	Jan 11, 2010	< 1.0	20 ug/L	No	No
Dicamba	Jan 11, 2010	< 1.0	120 ug/L	No	No
1,2-Dichlorobenzene	Feb 18, 2010	1.0	200 ug/L	No	No
1,4-Dichlorobenzene	Jan 11, 2010	< 0.4	5 ug/L	No	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan 11, 2010	< 0.02	30 ug/L	No	No
1,2-Dichloroethane	Jan 11, 2010	< 0.5	5 ug/L	No	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 11, 2010	< 0.5	14 ug/L	No	No
Dichloromethane	Jan 11, 2010	< 4.0	50 ug/L	No	No
2,4-Dichlorophenol	Jan 11, 2010	< 0.5	900 ug/L	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 11, 2010	< 1.0	100 ug/L	No	No
Diclofop-methyl	Jan 11, 2010	< 0.9	9 ug/L	No	No
Dimethoate	Jan 11, 2010	< 2.5	20 ug/L	No	No
Dinoseb	Jan 11, 2010	< 1.0	10 ug/L	No	No
Diquat	Jan 11, 2010	< 7.0	70 ug/L	No	No
Diuron	Jan 11, 2010	< 10.0	150 ug/L	No	No
Glyphosate	Jan 11, 2010	< 10.0	280 ug/L	No	No
Hepachlor + Heptachlor Epoxide	Jan 11, 2010	< 0.01	3 ug/L	No	No
Lindane (Total)	Jan 11, 2010	< 0.01	4 ug/L	No	No
Malathion	Jan 11, 2010	< 5.0	190 ug/L	No	No
Methoxychlor	Jan 11, 2010	< 0.02	900 ug/L	No	No
Metolachlor	Jan 11, 2010	< 0.5	50 ug/L	No	No
Metribuzin	Jan 11, 2010	< 5.0	80 ug/L	No	No
Monochlorobenzene	Jan 11, 2010	< 0.2	80 ug/L	No	No
Paraquat	Jan 11, 2010	< 1.0	10 ug/L	No	No
Parathion	Jan 11, 2010	< 1.0	50 ug/L	No	No
Pentachlorophenol	Jan 11, 2010	< 0.5	60 ug/L	No	No
Phorate	Jan 11, 2010	< 0.5	2 ug/L	No	No
Picloram	Jan 11, 2010	< 5.0	190 ug/L	No	No
Polychlorinated Biphenyls (PCB)	Jan 11, 2010	< 0.1	3 ug/L	No	No
Prometryne	Jan 11, 2010	< 0.25	1 ug/L	No	No
Simazine	Jan 11, 2010	< 1.0	10 ug/L	No	No
THM (Treated)	2010	48.45	100 ug/L	No	No

(NOTE: show latest annual average)	2010	77.2	100 ug/L	No	Yes
THM (Distribution) (NOTE: show latest annual average)					
Temephos	Jan 11, 2010	<10.0	280 ug/L	No	No
Terbufos	Jan 11, 2010	<0.4	1 ug/L	No	No
Tetrachloroethylene	Jan 11, 2010	<0.3	30 ug/L	No	No
2,3,4,6-Tetrachlorophenol	Jan 11, 2010	<0.5	100 ug/L	No	No
Triallate	Jan 11, 2010	<1.0	230 ug/L	No	No
Trichloroethylene	Jan 11, 2010	<0.3	5 ug/L	No	No
2,4,6-Trichlorophenol	Jan 11, 2010	<0.5	5 ug/L	No	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan 11, 2010	<1.0	280 ug/L	No	No
Triflurathin	Jan 11, 2010	<0.4	45 ug/L	No	No
Vinyl Chloride	Jan 11, 2010	<0.2	2 ug/L	No	No

Maintenance Summary-

Summary of Expenses Incurred for Installations, Repairs or Replacements:

Brief Description
BACK WATER VALVE PURCHASED FOR PUMPING STATION AT THE WATER TREATMENT PLANT IN PETAWAWA.
MISCELLANEOUS CAPITAL ITEMS PURCHASED FOR REPAIR AND MAINTENANCE OF THE WATER TREATMENT FACILITY IN PETAWAWA.
PURCHASE OF PAINTING SUPPLIES FOR THE SODA ASH SILO AT WATER TREATMENT FACILITY IN PETAWAWA.
REPAIR OF ANCHOR POINTS ON CL2 HOIST AT THE WATER TREATMENT FACILITY IN PETAWAWA. REPAIRS COMPLETED BY KEVIN BOIFE CONSTRUCTION LTD.
COMPLETION OF PROGRAMMING OF AUTOMATED CT CALCULATION COAGULENT FLOW METER AND ADDITION OF PASSWORDS FOR NEW EMPLOYEES AND FILTER PERFORMANCE.
PURCHASE OF NEW IP POSITIONER FOR ACTUATORS AT THE WATER TREATMENT FACILITY IN PETAWAWA AND ANOTHER FOR SPARE . AS THIS UNIT IS NO LONGER AVAILABLE.
REPLACEMENT OF HEAT CIRCULATING PUMP PARTS AND MOTORS SUPPLIED BY RICKS ELECTRIC.
REPLACED SOLENOID VALVE ON SODA ASH; INSTALLED HEAT CIRC PUMP ON BOILER; REPLACED SAMPLE PUMP FOR FILTER #1.
REPLACED SOLENOID ON SODA ASH.
INSTALLED HEAT CIRCULATION PUMP IN BOILER ROOM.
REPLACEMENT OF PH SENSORS FOR PH ANALYZERS AT THE WTP IN PETAWAWA.
REPLACED TWO BALLASTS IN LAB.
PUMP REBUILT AT PETAWAWA WATER TREATMENT PLANT.

REPAIR OF HIGH #2 PUMP MOTOR COMPLETED BY RICKS ELECTRIC.
REPLACEMENT MAIN BOARD REQUIRED FOR TOTAL O2 ANALYZER AT THE WATER TREATMENT PLANT IN PETAWAWA.
REPLACEMENT OF #1 BOILER AND REPAIR MAINTENANCE OF #2 AND #3 BOILERS AT THE WATER TREATMENT FACILITY IN PETAWAWA.
PURCHASED REPLACEMENT OF CL17 FREE CL2 ANALYZER.
ANNUAL MAINTENANCE KITS AND BULBS PURCHASED FOR ONLINE ANALYZERS.
HEAT CIRCULATING PUMPS AND HEATER FAN MOTORS PURCHASED AT THE WATER TREATMENT FACILITY IN PETAWAWA.
BATTERIES PURCHASED FOR BACKUP DIESEL GENERATOR AT THE WATER TREATMENT PLANT IN PETAWAWA
REPLACEMENT SEAL AND MINOR REPAIR KITS PURCHASED FOR PUMPS AT BS#2 & PUMP #4, DUE TO LEAKING.

**ANNUAL WATER TAKING AND TRANSFER
REPORT - SUBMITTED DATA TO MOE,
FOR THE YEAR OF 2010**



Annual Water Taking Report
 For the Year 2010

Raw Flow: Sum (m3/d)

Municipality:	Town of Petawawa	Year:	2010
Facility Name:	[5710] - Petawawa Water Treatment Plant	Water Source:	Allumette Lake (Ottawa River)
Works:	[210002101] - Petawawa Water Treatment Plant	Total Design Capacity (m3/day):	21,500.00
Classification:	Class 4 Water Treatment	Population Served:	13,328

January	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	5,445.000	5,361.000	5,892.000	5,201.000	6,008.000	5,786.000	5,554.000	6,079.000	5,387.000	6,062.000	6,214.000	6,032.000	5,968.000	5,826.000	5,977.000	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water																
	5,785.000	5,727.000	6,339.000	5,789.000	6,232.000	5,595.000	5,843.000	5,675.000	5,629.000	5,730.000	5,703.000	5,486.000	5,663.000	5,594.000	5,926.000	5,424.000
February	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	5,876.000	5,926.000	5,796.000	5,858.000	5,897.000	5,645.000	5,410.000	6,008.000	6,043.000	6,550.000	4,019.000	5,649.000	5,454.000	5,207.000	5,479.000	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water																
	5,928.000	5,087.000	5,468.000	5,223.000	4,932.000	4,713.000	5,352.000	5,195.000	4,899.000	5,245.000	4,978.000	5,981.000	4,823.000			

Annual Water Taking Report

For the Year 2010

March	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	5,762.000	5,555.000	5,556.000	5,576.000	5,471.000	5,303.000	5,588.000	5,562.000	5,650.000	5,475.000	5,490.000	5,505.000	5,447.000	5,190.000	4,862.000	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water																
	5,144.000	5,392.000	5,002.000	5,395.000	4,909.000	4,861.000	5,729.000	5,410.000	5,444.000	5,729.000	5,975.000	5,434.000	5,329.000	5,766.000	5,426.000	5,746.000
April	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	5,876.000	5,403.000	5,345.000	5,185.000	5,235.000	5,357.000	5,483.000	5,889.000	5,419.000	5,235.000	5,616.000	5,398.000	6,809.000	5,810.000	5,613.000	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water																
	5,302.000	5,082.000	5,093.000	5,592.000	5,630.000	6,082.000	5,734.000	5,652.000	5,954.000	5,995.000	6,466.000	6,447.000	5,739.000	6,183.000	6,608.000	
May	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	5,706.000	5,507.000	6,306.000	6,259.000	6,421.000	6,739.000	6,134.000	5,619.000	4,996.000	5,871.000	6,518.000	6,561.000	6,646.000	6,522.000	6,286.000	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water																
	5,831.000	7,287.000	9,758.000	9,304.000	10,226.000	9,964.000	9,605.000	9,249.000	9,370.000	11,346.000	11,693.000	9,134.000	8,676.000	7,308.000	8,722.000	8,871.000
June	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	6,513.000	7,747.000	6,355.000	6,823.000	7,128.000	5,714.000	6,919.000	7,502.000	7,631.000	6,420.000	6,404.000	6,414.000	6,194.000	8,283.000	7,564.000	



Annual Water Taking Report
For the Year 2010

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	8,397.000	6,525.000	7,970.000	9,007.000	7,510.000	8,557.000	9,169.000	7,501.000	7,098.000	6,441.000	6,626.000	7,030.000	7,422.000	7,392.000	7,070.000	

July	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	6,614.000	6,827.000	8,136.000	8,572.000	9,584.000	11,140.000	11,068.000	11,280.000	9,531.000	6,167.000	7,445.000	9,439.000	13,113.000	6,943.000	8,481.000

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	7,996.000	9,044.000	7,123.000	7,539.000	7,946.000	8,748.000	6,480.000	7,834.000	5,589.000	6,241.000	7,005.000	8,698.000	9,147.000	7,381.000	8,361.000	8,273.000

August	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	7,921.000	8,216.000	7,510.000	7,081.000	7,419.000	8,684.000	7,325.000	7,066.000	6,503.000	7,596.000	8,323.000	9,243.000	8,932.000	9,199.000	8,033.000

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	6,812.000	8,148.000	8,558.000	9,257.000	7,246.000	7,822.000	6,168.000	6,287.000	7,522.000	7,426.000	8,271.000	7,001.000	7,500.000	7,878.000	8,668.000	10,663.000

September	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	10,897.000	9,974.000	6,852.000	6,777.000	5,839.000	5,728.000	6,619.000	6,648.000	6,563.000	6,211.000	6,932.000	6,676.000	7,152.000	7,047.000	6,759.000

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	7,878.000	6,869.000	6,906.000	6,329.000	7,199.000	7,139.000	6,786.000	6,782.000	8,194.000	6,254.000	5,920.000	6,675.000	7,030.000	6,472.000	5,417.000	

Annual Water Taking Report
For the Year 2010

October	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	6,407.000	5,391.000	4,786.000	5,201.000	6,865.000	7,559.000	7,281.000	5,066.000	4,402.000	3,930.000	4,300.000	4,473.000	5,516.000	6,514.000	5,771.000	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water																
	6,197.000	5,261.000	5,804.000	6,301.000	6,365.000	6,246.000	6,505.000	5,290.000	5,316.000	6,123.000	6,409.000	5,941.000	5,048.000	6,258.000	5,782.000	5,495.000
November	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	5,939.000	6,329.000	6,276.000	5,811.000	5,591.000	5,623.000	5,855.000	5,943.000	5,870.000	5,908.000	6,257.000	5,339.000	5,642.000	5,554.000	6,076.000	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water																
	8,055.000	6,314.000	5,700.000	5,460.000	5,988.000	5,506.000	5,827.000	5,992.000	6,056.000	5,853.000	5,534.000	5,706.000	5,231.000	6,129.000	5,927.000	
December	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
RW - Raw Water																
	5,913.000	5,796.000	5,752.000	5,691.000	5,034.000	5,711.000	6,061.000	5,868.000	6,171.000	6,168.000	6,215.000	6,065.000	6,171.000	5,834.000	6,538.000	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water																
	6,138.000	5,759.000	6,375.000	5,680.000	5,436.000	6,394.000	5,767.000	5,420.000	5,939.000	5,533.000	5,159.000	5,431.000	5,581.000	5,293.000	5,364.000	5,482.000