THE TOWN OF DEEP RIVER
ONTARIO, CANADA

DEEP RIVER DRINKING WATER SYSTEM
2012 ANNUAL REPORT

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Ottawa Valley Hub

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Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Foreword

This document contains three different reports required for the Deep River 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.

SECTION 11

ANNUAL REPORT 2012

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:	Deep River Drinking Water System
Municipal Drinking Water Licence #	189-101, Issue # 1
Drinking Water Works Permit #	189-201, Issue # 1
Drinking Water System Number:	220000923
System Owner:	Deep River, The Corporation of the Town of
Operating Authority:	Ontario Clean Water Agency
Drinking Water System Category:	Large Municipal Residential
DWQMS Status (SAI Global Certified- File # 1634171-01)	Full Scope/Entire DWQMS – December 15, 2012
Reporting Period:	January 1, 2012 – December 31, 2012

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

Town of Deep River
100 River Road, Box 400
Deep River, ON
K0J 1P0

List all Drinking Water Systems which receive all of their drinking water from your System:

Name	Drinking Water System Number
No other systems receive water from this system.	

Provide a brief description of the System:

There are three Actiflo units that provide coagulation, flocculation and sedimentation. PAS-8 and polymer are added in the Actiflo process. Filtration is provided by dual media filters. Post disinfection is provided using chlorine gas. pH is adjusted using caustic soda both before the Actiflo process and as the treated water enters the distribution system.

What Treatment Chemicals were used during the Reporting Year:

Chemical Name	Use	Supplier
Alum/PAS-8	Coagulant	Kemira
Fluoride	Fluoridation	Brenntag
Chlorine Gas	Disinfection	Brenntag
Caustic Soda	pH Adjustment	ClearTech
Magnifloc LT27AG	Actiflo	BASF Canada Ltd
Centrifuge Polymer (Zetag 8140)	Lamella Clarifier & Centrifuge Process	BASF Canada Ltd
Silica Sand	Actiflo Process	John Meunier

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	
The Deep River Drinking Water System had no Adverse Water Quality Incidents during the 2012 reporting year.					

Does your Drinking-Water System serve more than 10 000 people?
NO

Is your annual report available to the public at no charge on a web site on the internet?
YES

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

- Notice via the Town of Deep River's internet website
- Notice via Government Office

Capacity Assessment of the Deep River Drinking Water System:

Year	2008	2009	2010	2011	2012
Av. Day Flow (m^3/d)	3 157.88	3 566.84	3 159.01	2 869.83	2 661.46
Design Capacity (m^3/d)	13 638.0	13 638.0	13 638.0	13 638.0	13 638.0
% of Capacity (based on av. day flows)	23.2	26.2	23.2	21.0	19.5
Max. Day Flow (m^3/d)	7 007.0	8 151.5	6 332.9	6 013.0	5 231.4
% of Capacity (based on max. day flows)	51.4	59.8	46.4	44.1	38.4

In 2012, the average day flow was at approximately 19.5% of the current plant design, and the maximum day flow was at approximately 38.4% of the plant design of 13 638.0 m^3/d.

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	52	0-4	52	0-66	52	1-293
Treated	52	0-0	52	0-0	52	0-8
Distribution	213	0-0	213	0-0	213	0-27

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

Parameter	Ont. Reg. 170/03 Standard	Range of Results (min # - max #)
Filter #1 Turbidity	1 NTU	0.043 – 0.35 NTU
Filter #2 Turbidity	1 NTU	0.033 – 0.3 NTU
Filter #3 Turbidity	1 NTU	0.038 – 0.3 NTU
Treated Free Chlorine	0.05 mg/L – 4 mg/L	0.005 – 3.484 mg/L *
Treated Fluoride	1.5 mg/L***	0 – 0.79 mg/L**

*Chlorine spikes recorded by on-line instrumentation were a result of various maintenance/calibration activities. All spikes are reviewed for compliance with O. Reg. 170/03 and reported as required.
** Fluoride On-Line Analyzer functioning as of August 2009 at plant.
*** 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 #)
Filter #1 Turbidity	51	1 NTU	0.078 – 0.298 NTU
Filter #2 Turbidity	53	1 NTU	0.088 – 0.29 NTU
Filter #3 Turbidity	51	1 NTU	0.064 – 0.99 NTU
Treated Water Turbidity	50	1 NTU	0.113 – 0.285 NTU
Treated Water pH	249	6.0 – 8.5 (OG)	6.96 – 7.77
Treated Water Alkalinity	50	30 – 500 mg/L (OG)*	11 – 34 mg/L
Treated Water Aluminum	50	0.1 mg/L (OG)	0.001 – 0.038 mg/L
Treated Water Colour	50	5 TCU (AO)**	0 – 3 TCU
Treated Water Fluoride	213	1.5 mg/L	0.1 – 0.59 mg/L
Treated Water Free Chlorine	249	0.05 mg/L – 4.0 mg/L	1.47 – 2.2 mg/L
Treated Water	249	0.25 mg/L – 3.0 mg/L	0.19 – 2.07 mg/L

Total Chlorine			
Distribution Free Chlorine	490	0.2 mg/ L – 4.0 mg/L	0.1 – 1.81 mg/L

* (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	12	30 - 500 mg/L (OG)	12 – 23 mg/L
Treated Water Colour	12	5 TCU (AO)	2 – 3 TCU
Treated Water Conductivity	12	300 – 500 uS/cm	106 – 131 uS/cm
Treated Water Fluoride	13	1.5 mg/L	0.18 – 0.6 mg/L
Treated Water pH	12	6.5 - 8.5 (OG)	6.7 – 7.25
Treated Water Total Dissolved Solids	12	500 mg/L (AO)	60 – 120 mg/L
Treated Water Hardness	12	80 -100 mg/L (OG)	14 – 28 mg/L
Treated Water Aluminum	12	0.1 mg/L (OG)	0.03 – 0.11 mg/L
Treated Water Iron	12	0.3 ug/L (AO)	< 30 - < 30 ug/L
Distribution Water Alkalinity	15	30 - 500 mg/L (OG)	12 – 24 mg/L
Distribution Water Colour	14	5 TCU (AO)	2 – 13 mg/L
Distribution Water Conductivity	14	300 – 500 uS/cm	98 – 137 uS/cm
Distribution Fluoride	14	1.5 mg/L	0.44 – 0.56 mg/L
Distribution pH	14	6.5 – 8.5 (OG)	6.58 – 7.3
Distribution Water Total Dissolved Solids	14	500 mg/L (AO)	30 – 140 mg/L
Distribution Water Hardness	14	80 – 100 mg/L (OG)	17 – 28 mg/L
Distribution Water Aluminum	14	0.1 mg/L (OG)	0.03 – 0.1 mg/L
Distribution Water Iron	14	0.3 ug/L (AO)	30 – 450 ug/L

Summary of Additional Samples:

Reason	Date of Issuance	Parameter	Date Sampled	Result/ Range	Unit of measure
Certificate of Approval #2201-7ARPRY	04-Feb-08	Backwash Effluent Suspended Solids	Monthly	< 2 – 6*	mg/L

*The annual average for Backwash Effluent Suspended Solids is 2.7 mg/L which is below the limit of 25 mg/L.

Summary of Inorganic Parameters Tested or Most Recent Sample Result:

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 ½ MAC
Antimony	Jan 16/2012	< 0.5 ug/L	6 ug/L	No	No
Arsenic	Jan 16/2012	< 1.0 ug/L	25 ug/L	No	No
Barium	Jan 16/2012	< 10.0 ug/L	1000 ug/L	No	No
Boron	Jan 16/2012	< 10.0 ug/L	5000 ug/L	No	No
Cadmium	Jan 16/2012	< 0.1 ug/L	5 ug/L	No	No
Chromium	Jan 16/2012	1.0 ug/L	50 ug/L	No	No
Mercury	Jan 16/2012	< 0.1 ug/L	1 ug/L	No	No
Selenium	Jan 16/2012	< 1.0 ug/L	10 ug/L	No	No
Sodium	Jan 11/2010	17.0 mg/L	20 mg/L	No	Yes*
Uranium	Jan 16/2012	< 1.0 ug/L	20 ug/L	No	No
Fluoride Residual: Mean	Dec 3/12	0.54 mg/L	1.5 mg/L	No	No
1st Quarter Nitrite	Jan 5/2012	< 0.1 mg/L	1 mg/L	No	No
2nd Quarter Nitrite	Apr 3/12	< 0.1 mg/L	1 mg/L	No	No
3rd Quarter Nitrite	Jul 3/12	< 0.1 mg/L	1 mg/L	No	No
4th Quarter Nitrite	Oct 2/12	< 0.1 mg/L	1 mg/L	No	No
1st Quarter Nitrate	Jan 5/2012	0.18 mg/L	10 mg/L	No	No
2nd Quarter Nitrate	Apr 3/12	0.19 mg/L	10 mg/L	No	No
3rd Quarter Nitrate	Jul 3/12	0.14 mg/L	10 mg/L	No	No
4th Quarter Nitrate	Oct 2/12	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 200 mg/L at which it can be detected by a salty taste.

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 ½ MAC
Alachlor	Jan 16/2012	< 0.5	5 ug/L	No	No
Aldicarb	Jan 16/2012	< 5.0	9 ug/L	No	No
Aldrin + Dieldrin	Jan 16/2012	< 0.01	0.7 ug/L	No	No
Atrazine + N-Dealkylated metobolites	Jan 16/2012	< 0.2	5 ug/L	No	No
Azinphos-methyl	Jan 16/2012	< 2.0	20 ug/L	No	No
Bendiocarb	Jan 16/2012	< 2.0	40 ug/L	No	No
Benzene	Jan 16/2012	< 0.5	5 ug/L	No	No
Benzo(a)pyrene	Jan 16/2012	< 0.01	0.01 ug/L	No	No
Bromoxynil	Jan 16/2012	< 0.5	5 ug/L	No	No
Carbaryl	Jan 16/2012	< 5.0	90 ug/L	No	No
Carbofuran	Jan 16/2012	< 5.0	90 ug/L	No	No
Carbon Tetrachloride	Jan 16/2012	< 0.5	5 ug/L	No	No
Chlordane (Total)	Jan 16/2012	< 0.02	7 ug/L	No	No
Chlorpyrifos	Jan 16/2012	< 1.0	90 ug/L	No	No
Cyanazine	Jan 16/2012	< 1.0	10 ug/L	No	No
Diazinon	Jan 16/2012	< 1.0	20 ug/L	No	No

Dicamba	Jan 16/2012	< 1.0	120 ug/L	No	No
1,2-Dichlorobenzene	Jan 16/2012	< 0.4	200 ug/L	No	No
1,4-Dichlorobenzene	Jan 16/2012	< 0.4	5 ug/L	No	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan 16/2012	< 0.02	30 ug/L	No	No
1,2-Dichloroethane	Jan 16/2012	< 0.2	5 ug/L	No	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 16/2012	< 0.5	14 ug/L	No	No
Dichloromethane	Jan 16/2012	< 4.0	50 ug/L	No	No
2,4-Dichlorophenol	Jan 16/2012	< 0.5	900 ug/L	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 16/2012	< 1.0	100 ug/L	No	No
Diclofop-methyl	Jan 16/2012	< 0.9	9 ug/L	No	No
Dimethoate	Jan 16/2012	< 2.5	20 ug/L	No	No
Dinoseb	Jan 16/2012	< 1.0	10 ug/L	No	No
Diquat	Jan 16/2012	< 5.0	70 ug/L	No	No
Diuron	Jan 16/2012	< 10.0	150 ug/L	No	No
Glyphosate	Jan 16/2012	< 10.0	280 ug/L	No	No
Heptachlor + Heptachlor Epoxide	Jan 16/2012	< 0.01	3 ug/L	No	No
Lindane (Total)	Jan 16/2012	< 0.01	4 ug/L	No	No
Malathion	Jan 16/2012	< 5.0	190 ug/L	No	No
Methoxychlor	Jan 16/2012	< 0.02	900 ug/L	No	No
Metolachlor	Jan 16/2012	< 0.5	50 ug/L	No	No
Metribuzin	Jan 16/2012	< 5.0	80 ug/L	No	No
Monochlorobenzene	Jan 16/2012	< 0.2	80 ug/L	No	No
Paraquat	Jan 16/2012	< 5.0	10 ug/L	No	No
Parathion	Jan 16/2012	< 1.0	50 ug/L	No	No
Pentachlorophenol	Jan 16/2012	< 0.5	60 ug/L	No	No
Phorate	Jan 16/2012	< 0.5	2 ug/L	No	No
Picloram	Jan 16/2012	< 5.0	190 ug/L	No	No
Polychlorinated Biphenyls (PCB)	Jan 16/2012	< 0.1	3 ug/L	No	No
Prometryne	Jan 16/2012	< 0.25	1 ug/L	No	No
Simazine	Jan 16/2012	< 1.0	10 ug/L	No	No
TTHM (Treated) (NOTE: show latest annual average)	2012	64.3	100 ug/L	No	Yes
TTHM (Distribution) (NOTE: show latest annual average)	2012	91.2	100 ug/L	No	Yes
Temephos	Jan 16/2012	< 10.0	280 ug/L	No	No
Terbufos	Jan 16/2012	< 0.4	1 ug/L	No	No
Tetrachloroethylene	Jan 16/2012	< 0.3	30 ug/L	No	No
2,3,4,6-Tetrachlorophenol	Jan 16/2012	< 0.5	100 ug/L	No	No
Triallate	Jan 16/2012	< 1.0	230 ug/L	No	No
Trichloroethylene	Jan 16/2012	< 0.3	50 ug/L	No	No
2,4,6-Trichlorophenol	Jan 16/2012	< 0.5	5 ug/L	No	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan 16/2012	< 1.0	280 ug/L	No	No
Trifluralin	Jan 16/2012	< 0.4	45 ug/L	No	No
Vinyl Chloride	Jan 16/2012	< 0.2	2 ug/L	No	No

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

Round #5 – Reduced Sampling – Summer Period - June 15/11 to October 15/11

Residential Samples-

# of Samples	# Adverse MAC (> 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
20	0	2	0.010	< 0.001	0.002	< 0.001	7.26	7.09

Non-Residential Samples-

# of Samples	# Adverse MAC (> 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
2	0	1	0.007	< 0.001	0.001	< 0.001	7.19	7.17

Distribution Samples-

# of Samples	# Adverse MAC (> 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 (mg/L)	Min Result (mg/L)
3	0	0	0.001	< 0.001	7.18	7.13	26	22

Round #6 – Reduced Sampling – Winter Period - December 15/11 to April 15/12

Residential Samples-

# of Samples	# Adverse MAC (> 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
20	0	2	0.008	< 0.001	0.005	< 0.001	7.35	7.08

Non-Residential Samples-

Non-Residential Samples-

# of Samples	# Adverse MAC (> 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
2	0	1	0.006	< 0.001	0.002	< 0.001	7.38	7.28

Distribution Samples-

# of Samples	# Adverse MAC (> 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 (mg/L)	Min Result (mg/L)
3	0	0	< 0.001	< 0.001	7.36	7.32	15	13

Facility Work Order Status:

Preventative Work Orders Completed	237
Operational Work Orders Completed	18
Weekly Maintenance Orders Completed	26
Capital Work Orders Completed	5
Corrective Work Orders Completed	8

Maintenance Summary:

Brief Description - Summary of Expenses Incurred for Installations, Repairs or Replacements-

- Purchase of SCHONTEDT GA-52CX magnetic locator for use in the Deep River distribution system activities.
- Costs associated with the SCADA system upgrades at the water plant.
- Miscellaneous capital items required for repair and maintenance.
- Purchase of a backflow preventer.
- Costs for the intake and outfall inspections, and water tower by contractors.
- Purchase of a vacuum pump to perform laboratory analysis.
- Purchase of replacement parts for the actiflow recirculation pumps.

Distribution Activities for 2012:

Distribution Activities for 2012:

Background: OCWA is responsible for the operation of the water treatment plant and water storage facility (1 tower), and the distribution system that OCWA assumed responsibility on April 1st, 2011.

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

Distribution Summary:

1. OCWA Operators attended to four water main breaks during 2012:
   - February 13, 2012: Rutherford Avenue
   - December 4, 2012: Corner of Glendale Avenue & Birch Street
   - December 11, 2012: Corner of Glendale Avenue & Birch Street
   - December 15, 2012: Alder Crescent

2. Hydrant Flushing was performed on approx. 237 hydrants between May to December 2012. The Spring Flushing program for the west end started on May 14th, 2012 and was completed on May 25th, 2012. The Spring Flushing program for the east end started on June 11th, 2012 and was completed on June 21st, 2012. Flushing for the Fall program for both the west end and east ends of Town started on October 11th, 2012 and was completed by the end of October 2012. Thawing and pumping of non-draining hydrants, and installing anti-freeze to winterize the hydrants, started on November 29th, 2012 and was completed by December 6th, 2012.

3. Community Lead Sampling was conducted for the Winter Period (December 15, 2011 to April 15, 2012) from April 5th – 19th, 2012. The sample collected on April 19th was a distribution re-sample due to a lab error. Both residential and hydrant (distribution plumbing) samples were collected under the reduced sampling requirement.

4. Water Service Inspections (including water turn on/offs, locates, pressure/flow testing, hydrant flushing, piping installations, hydrant replacements, valve locates/exercising, tapping of pipes, collecting bacti samples for new pipe installations, winterizing hydrants, installing backflow preventers, etc.) were performed on many homes in the newer subdivisions, and with renovations to older homes/facilities within the Town of Deep River. The numbers are as follows: (Total of 108 Inspections)

Deep River Marina: 1
Beattie Crescent: 6
Highway #17 West: 4
Maple Street: 1
Pine Point Road: 2
Birch Street: 3
Dalton Street: 2
Granite Lane: 1
Glendale Avenue: 4
Kennedy Place: 2

Maple Street: 1
Pine Point Road: 2
Yacht & Tennis Club: 3
Grouse Park: 2
Deep River Golf Club: 1
Lasalle Drive: 3
Hospital Gardens: 1
Banting Drive: 2
Lamure Beach: 1
Deep River Cemetery: 1
Beach Avenue: 2
Cartier Circle: 2
Pier Road: 1
Forest Avenue: 3
Laurentian Street: 1
AECL Garages: 1
Morrison School: 1
Hillcrest Avenue: 2
Rutherford Avenue: 2
Deep River Lawn Bowling Club: 1
Iberville Street: 2
Maple Street: 3
Pine Point Road: 1
Glendale Avenue: 4
Kennedy Place: 2
Huron Street: 2
Frontenac Crescent: 3
Chadwick Drive: 4
Cedar Park Gardens: 1
Mountain View Gardens: 2
Greenwood Road: 1
Town Hall: 1
Cockcroft Crescent: 2
Hillcrest Avenue: 2
Thomas Street: 1
Wolfe Avenue: 3
Cabot Place: 4
Town Campus: 2
Town Library & Daycare: 1
Golf Course Road: 1
St. Mary's School: 1
McElligott Drive: 5
Lasalle Drive: 4
Newton Crescent: 5
Parkdale Avenue: 1

SUMMARY REPORT

2012

DEEP RIVER DRINKING WATER SYSTEM

2012 SUMMARY REPORTS FOR MUNICIPALITIES

Report:

This report is a summary of water quality information for the Deep River Drinking Water System, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1, 2012 to December 31, 2012. The Deep River 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 Deep River.

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)
The Deep River Drinking Water System had no Adverse Water Quality Incidents for the 2012 reporting year.					

DEEP RIVER DRINKING WATER SYSTEM

2012 SUMMARY REPORTS FOR MUNICIPALITIES

The Ministry of Environment 2011-2012 Inspection Report:

The Ministry of Environment conducted their annual site visit for the 2011-2012 reporting year on October 3, 2012. The MOE Drinking Water Inspector had no "Actions Required" and only one "Recommended Action" for the Town of Deep River, identified in the inspection report. This recommendation was for the Town to strongly consider implementing a Cross Connection/Backflow Prevention Program. The final report was received on December 19, 2012 with an Inspection Rating of 100%.

Summary of 2012 Community Complaints/Service Forms:

- December 10, 2012: Newton Crescent – Brown-coloured water.
- December 7, 2012: Newton Crescent – Brown-coloured water after watermain repair.
- November 14, 2012: Lasalle Drive – chlorine tasting water.
- August 23, 2012: Beach Avenue – brown-coloured water.
- July 12, 2012: Glendale Avenue – odour and brown-coloured water.
- May 17, 2012: Lasalle Drive – colour of water.
- March 29, 2012: Brockhouse Way – cloudy water in toilet tank.
- January 11, 2012: Laurentian Street – colour of water.

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. A 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.

DEEP RIVER DRINKING WATER SYSTEM

2012 SUMMARY REPORTS FOR MUNICIPALITIES

Attached is a copy of the Annual Record of Water Taking for the Deep River 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 31st.

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

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 dossiers 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): 2012 Permit No.(N° de permis): 3664-63ZP3C Source: Ottawa River
Location: RW - Raw Water

Name of Permittee: Town of Deep River
Nom du titulaire du permis

Mailing Address: 100 Deep River Road, Deep River Ontario K0J 1P0
Adresse postale

Location Of Taking:
Lieu de la prise d'eau
Ottawa River

Twp. or Municipality:
Canton ou municipalité
Town of Deep River

Concession:

Lot:

	Jan/2012	Feb/2012	Mar/2012	Apr/2012	May/2012	Jun/2012	Jul/2012	Aug/2012	Sep/2012	Oct/2012	Nov/2012	Dec/2012	<-- Total -->	<-- Avg. -->	<-- Max. -->	<-- Criteria-->
Total Hours of Taking	268.92	244.14	268.72	265.22	377.72	416.08	571.9	398.74	406.81	388.14	326.31	296.58	4,229.28	352.44		
Avg Daily Taking(m3)	2,235.82	2,158.65	2,300.61	2,202.83	3,114.13	3,523.16	4,705.44	3,314.58	3,455.21	3,165.03	2,845.23	2,504.76		2,960.45		15,911.0
Total Amt of Taking(m3)	69,310.4	62,600.9	71,319.0	66,085.0	96,538.1	105,694.7	145,868.63	102,752.0	103,656.3	98,115.8	85,356.9	77,647.7	1,084,945.43			
Max Daily Flow(m3)	3,374.2	2,779.1	3,077.6	2,675.9	4,574.6	4,968.2	6,049.8	4,494.8	4,348.0	3,844.3	3,959.1	3,405.0			6,049.8	15,911.0
Peak Daily Rate of Taking(L/sec)	79.89	77.41	77.63	80.06	107.7	90.85	78.19	81.85	77.33	81.22	122.2	78.1			122.2	184.2
Peak Daily Rate of Taking(L/min)	4,793.4	4,644.6	4,657.8	4,803.6	6,462.0	5,451.0	4,691.4	4,911.0	4,639.8	4,873.2	7,332.0	4,686.0			7,332.0	11,049.0

Annual Water Taking Report

For the Year 2012

Raw Flow: Sum (m3/d)

Municipality:	Town of Deep River	Year:	2012
Facility Name:	[6097] - Deep River Water Treatment Plant	Water Source:	Ottawa River
Works:	[220000923] - Deep River Water Treatment Plant	Total Design Capacity (m3/day):	13,638.00
Classification:	Class 1 Water Distribution, Class 3 Water Treatment	Population Serviced:	4,000

January	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	2,268.300	2,637.100	1,412.700	2,502.300	2,092.000	2,142.400	2,234.900	2,764.900	2,900.200	2,085.700	1,652.000	2,820.500	2,073.400	1,787.500	2,673.900

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	2,057.500	2,403.700	2,171.200	2,238.100	2,116.300	1,823.300	2,818.500	1,662.100	2,710.000	1,380.400	3,374.200	2,148.500	2,424.400	1,568.600	2,587.100	1,778.700

February	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	2,701.100	1,783.000	1,733.000	2,143.200	2,610.200	2,779.100	1,825.200	1,820.700	2,160.500	2,355.500	1,864.000	2,305.100	2,369.600	1,946.000	2,025.400

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	1,988.900	2,013.700	2,284.700	2,225.000	2,105.400	2,105.400	1,973.200	2,486.000	2,255.100	1,734.200	2,337.700	2,339.300	1,876.000	2,454.700		

Annual Water Taking Report

For the Year 2012

March	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	2,246.800	2,269.100	1,790.000	2,315.700	2,195.200	2,003.300	2,239.400	1,960.800	2,147.500	2,147.500	2,243.100	2,473.600	2,072.900	2,367.200	2,397.800

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	2,125.100	1,648.000	2,533.100	2,614.100	2,578.400	1,794.900	2,554.200	3,069.300	2,712.800	2,218.100	2,581.800	3,077.600	2,547.300	2,409.800	2,079.500	1,905.100

April	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	2,553.200	2,453.900	1,971.700	2,184.400	2,123.700	1,907.400	1,862.800	2,208.000	2,499.600	1,435.500	1,912.500	1,814.500	2,408.400	2,150.000	2,675.900

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	2,323.000	1,661.300	2,527.300	2,607.900	2,021.200	1,915.400	2,578.800	2,282.100	2,129.900	2,390.000	1,696.200	2,589.300	2,670.500	2,600.300	1,930.300	

May	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	2,124.500	2,488.500	2,602.200	2,092.200	2,107.900	2,741.600	2,522.400	2,453.800	2,368.500	1,944.700	2,946.400	2,915.200	2,670.600	3,811.600	3,408.200

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	2,836.700	3,085.300	2,953.700	3,342.700	4,004.300	4,574.600	3,621.300	4,270.500	4,279.200	3,779.800	4,409.000	3,195.500	4,067.000	2,936.100	2,989.000	2,995.100

June	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	3,290.000	1,649.000	3,485.600	2,264.200	3,475.200	2,675.600	2,736.500	2,833.200	2,476.700	3,492.100	3,673.200	3,626.100	2,900.000	3,692.800	3,051.600

Annual Water Taking Report

For the Year 2012

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	3,749.800	4,088.500	2,698.400	3,887.800	4,422.400	4,466.000	4,015.300	4,400.600	3,220.500	2,677.900	4,114.100	4,224.400	4,811.100	4,968.200	4,627.900	

July	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	4,258.400	4,979.900	4,280.200	4,626.500	5,093.700	5,000.600	5,505.600	5,209.100	5,569.800	5,309.200	6,049.800	5,115.000	5,796.700	5,938.500	4,709.700

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	4,643.900	3,298.100	4,241.330	4,547.400	4,240.500	4,374.800	5,165.500	4,078.400	4,137.600	4,296.900	2,905.600	4,237.000	4,569.000	5,153.800	4,742.100	3,794.000

August	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	3,686.600	4,235.900	3,401.500	4,494.800	3,608.300	4,355.900	3,643.400	3,005.400	3,325.300	2,900.500	2,580.700	2,365.000	2,917.500	2,876.900	3,437.300

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	3,168.900	3,015.800	2,592.900	2,965.300	2,588.100	2,791.800	2,745.700	3,499.900	2,889.600	3,224.300	3,494.500	3,016.900	3,299.800	4,198.600	4,438.600	3,986.300

September	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	3,941.200	4,105.200	4,348.000	3,541.400	3,862.100	3,225.700	3,917.200	3,022.000	3,361.500	3,412.200	3,439.500	3,649.400	3,499.600	3,083.000	4,046.900

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	2,793.500	3,927.700	3,931.900	2,701.100	3,412.600	3,263.700	3,711.800	3,355.400	2,543.900	2,913.500	3,835.800	3,044.000	2,903.300	3,911.600	2,951.600	

Annual Water Taking Report

For the Year 2012

October	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	3,325.900	3,490.500	3,323.000	3,240.000	3,342.800	3,391.400	3,830.000	2,873.900	3,601.700	3,805.400	2,852.500	3,844.300	3,638.700	2,592.100	3,536.600

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	3,361.400	3,335.500	3,236.300	3,135.000	2,498.100	2,910.100	3,085.600	2,350.400	3,626.200	2,614.800	2,964.800	2,881.300	2,881.300	2,847.900	2,980.000	2,718.300

November	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	3,047.200	3,119.000	3,002.100	2,919.100	2,835.500	3,959.100	3,069.100	2,811.200	2,854.000	2,697.900	2,889.000	2,573.300	2,862.400	3,040.500	2,752.600

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	3,231.300	2,405.900	2,771.300	3,304.200	2,574.000	2,748.300	2,671.000	2,533.600	2,595.400	2,456.900	2,840.000	2,756.500	2,455.900	3,062.800	2,517.800	

December	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RW - Raw Water	2,554.400	2,751.100	2,755.600	2,239.900	2,547.400	1,776.000	2,724.000	1,750.600	2,931.400	2,416.700	2,357.500	2,067.000	2,548.300	2,684.000	2,923.800

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
RW - Raw Water	2,446.200	3,073.800	2,443.800	1,844.000	2,640.200	2,630.200	3,405.000	2,417.200	2,788.100	2,478.400	2,315.500	2,742.900	2,257.700	2,576.100	2,359.100	2,201.800

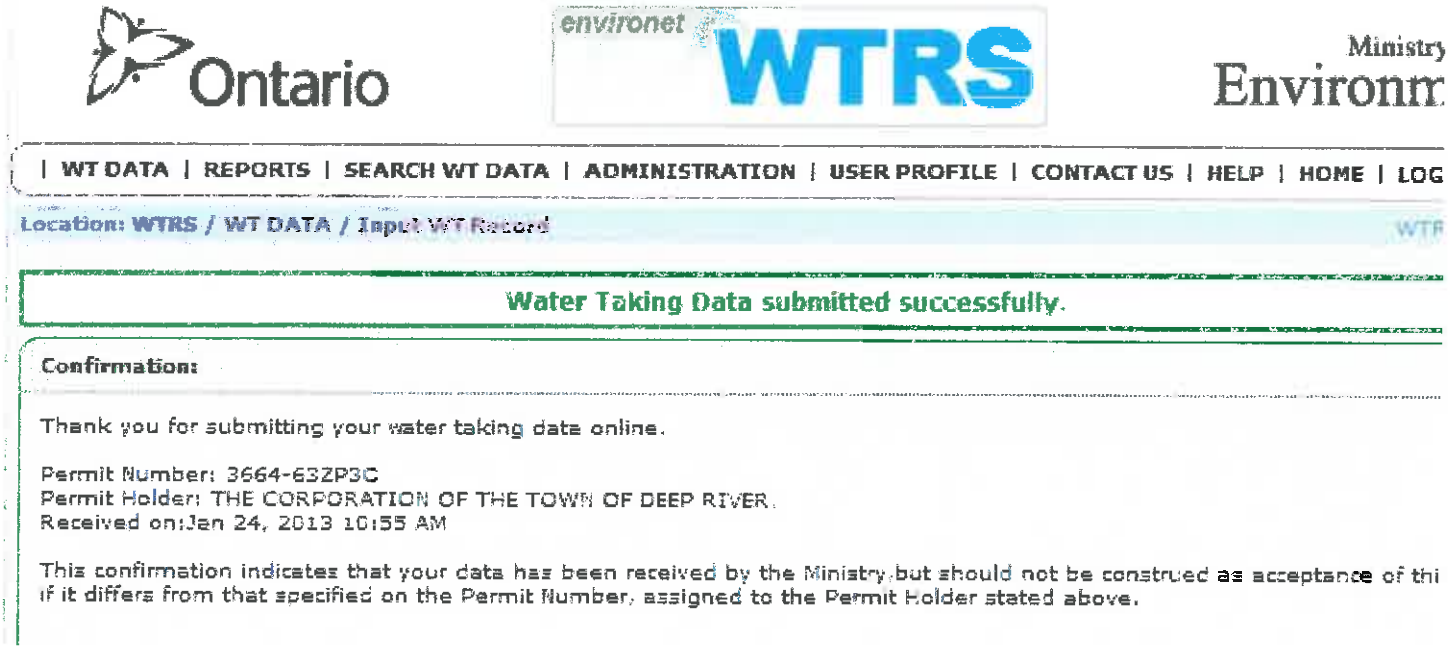
Brenda Royce

From: D'Apice, Helen (ENE) [Helen.DApice@ontario.ca]
Sent: January-24-13 11:00 AM
To: Brenda Royce
Subject: RE: XML files for WTRS

Hello Brenda

Thank you for your 2012 water taking submission for the following Permits to Take Water

PTTW 3664-63ZP3C



PTTW 2136-5ZDPP5