



**2015 ANNUAL REPORT**

<b>Drinking-Water System Licence:</b>	220002832 (OAP 177)
<b>Drinking-Water System Name:</b>	Hawkesbury Drinking Water System
<b>Drinking-Water System Owner:</b>	Corporation of the Town of Hawkesbury
<b>Drinking-Water System Category:</b>	Large Municipal Residential System
<b>Period being reported:</b>	January 1, 2015 to December 31, 2015

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people? Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ]</b></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet? Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ]</b></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>-Technical Services Department                      -Hawkesbury Public Library                      -Web site: <a href="http://www.hawkesbury.ca">www.hawkesbury.ca</a>                      -Township of Champlain</p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p><b>Number of Designated Facilities served:</b></p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ]</b></p> <p><b>Number of Interested Authorities you report to:</b></p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ]</b></p>
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**List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:**

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>
Township of Champlain (L'Original)	260037102
Township of Champlain (Vankleek Hill)	260002395
Township of Champlain (Park Laurentien)	260090012



## Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [] No []

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

- Public access/notice via the web  
 Public access/notice via Government Office  
 Public access/notice via a newspaper  
 Public access/notice via Public Request  
 Public access/notice via a Public Library  
 Public access/notice via other method \_\_\_\_\_

### Describe your Drinking-Water System

Our waterworks currently serves a population of 10,854 in Hawkesbury and a population of approximately 3,400 in the town of Champlain. In accordance with its Official Plan, all development in the town has been provided with municipal water and sewer services. Water is supplied by the Water Filtration Plant, which is owned and operated by the municipality, and sewage is treated at the Water Pollution Control Plant which is also owned and operated by the municipality.

Our Water Filtration Plant is located at 670 Main Street West in Hawkesbury, Ontario. The plant was constructed in 1953 and upgraded and expanded in 1996. The system's upgrade and expansion consisted mainly of the following works:

- Construction and integration of a second clarifier unit in the treatment process complete with related piping, controls, etc...
- Construction and integration of a second potable water underground storage tank (2760 m<sup>3</sup>) with related piping, controls, etc...
- Construction of a new settling and decanting tank for clarifier sludge and backwash wastewater.
- Supply and Installation of a new high lift pumping equipment.
- Supply and Installation of a new SCADA control system.
- Replacement and/or relocation of yard piping.

We also have a 5,454 m<sup>3</sup> elevated storage reservoir in our distribution system located on Spence Av. in Hawkesbury.



**List all water treatment chemicals used over this reporting period**

- Liquid Chlorine (Compressed gas)
- Hydrated Lime
- Sodium Aluminate
- Sodium Silicate
- Liquid Poly Hydroxy Aluminum Sulphate (PAS-8)
- Alum
- Hydro Fluosilicic Acid (25%)

**Were any significant expenses incurred to?**

- Install required equipment
- Repair required equipment
- Replace required equipment

**Please provide a brief description and a breakdown of monetary expenses incurred**

**We replace a Water main, Valve & new hydrant on Lansdowne St.**

**Estimate expenses \$2 189 000**

**Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre.**

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
none					

**Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03 during this reporting period.**

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
<b>Raw</b>	<b>52</b>	<b>(0) – (96)</b>	<b>(2) – (920)</b>	<b>n/a</b>	<b>n/a</b>
<b>Treated</b>	<b>52</b>	<b>(0) – (0)</b>	<b>(0) – (0)</b>	<b>51</b>	<b>(2) – (8)</b>
<b>Distribution</b>	<b>416</b>	<b>(0) – (0)</b>	<b>(0) – (0)</b>	<b>153</b>	<b>(2) - (82)</b>



**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.**

	Number of Grab Samples	Range of Results (min #)-(max #)
<b>Turbidity</b>	<b>8760</b>	<b>(0.12) – (0.38) NTU</b>
<b>Chlorine</b>	<b>8760</b>	<b>(0.61) – (1.14)</b>
<b>Fluoride</b>	<b>8760</b>	<b>(0.01) – (0.72)</b>

**Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.**

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
<b>April 25, 2005</b>	<b>Creek discharge (TSS)</b>	<b>1/ month</b>	<b>(3) – (11)</b>	<b>mg/L</b>

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedances
<b>Antimony</b>	<b>September 28, 2015</b>	<b>&lt; 0.0001</b>	<b>mg/L</b>	<b>no</b>
<b>Arsenic</b>	<b>September 28, 2015</b>	<b>0.0004</b>	<b>mg/L</b>	<b>no</b>
<b>Barium</b>	<b>September 28, 2015</b>	<b>0.012</b>	<b>mg/L</b>	<b>no</b>
<b>Boron</b>	<b>September 28, 2015</b>	<b>&lt; 0.006</b>	<b>mg/L</b>	<b>no</b>
<b>Cadmium</b>	<b>September 28, 2015</b>	<b>&lt; 0.00002</b>	<b>mg/L</b>	<b>no</b>
<b>Chromium</b>	<b>September 28, 2015</b>	<b>&lt; 0.002</b>	<b>mg/L</b>	<b>no</b>
<b>Mercury</b>	<b>September 28, 2015</b>	<b>&lt; 0.00002</b>	<b>mg/L</b>	<b>no</b>
<b>Selenium</b>	<b>September 28, 2015</b>	<b>&lt; 0.001</b>	<b>mg/L</b>	<b>no</b>
<b>Sodium</b>	<b>November 2, 2015</b>	<b>7.36</b>	<b>mg/L</b>	<b>no</b>
<b>Uranium</b>	<b>September 28, 2015</b>	<b>&lt; 0.00005</b>	<b>mg/L</b>	<b>no</b>
<b>Fluoride</b>	<b>November 2, 2015</b>	<b>0.56</b>	<b>mg/L</b>	<b>no</b>
<b>Nitrite</b>	<b>November 16, 2015</b>	<b>&lt; 0.1</b>	<b>mg/L</b>	<b>no</b>
<b>Nitrate</b>	<b>November 16, 2015</b>	<b>0.3</b>	<b>mg/L</b>	<b>no</b>

**Summary of lead testing under Schedule 15.1 during this reporting period**

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	6	(< 0.00002) – (0.00815)	n/a
Distribution	4	(< 0.00002) – (0.00005)	n/a

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	September 28, 2015	< 0.3	µg /L	no
Aldicarb	September 28, 2015	< 3	µg /L	no
Aldrin + Dieldrin	September 28, 2015	< 0.02	µg /L	no
Atrazine + N-dealkylated metabolites	September 28, 2015	< 0.5	µg /L	no
Azinphos-methyl	September 28, 2015	< 1	µg /L	no
Bendiocarb	September 28, 2015	< 3	µg /L	no
Benzene	September 28, 2015	< 0.5	µg /L	no
Benzo(a)pyrene	September 28, 2015	< 0.005	µg /L	no
Bromoxynil	September 28, 2015	< 0.3	µg /L	no
Carbaryl	September 28, 2015	< 3	µg /L	no
Carbofuran	September 28, 2015	< 1	µg /L	no
Carbon Tetrachloride	September 28, 2015	< 0.2	µg /L	no
Chlordane (Total)	September 28, 2015	< 0.04	µg /L	no
Chlorpyrifos	September 28, 2015	< 0.5	µg /L	no
Cyanazine	September 28, 2015	< 0.5	µg /L	no
Diazinon	September 28, 2015	< 1	µg /L	no
Dicamba	September 28, 2015	< 5	µg /L	no
1,2-Dichlorobenzene	September 28, 2015	< 0.1	µg /L	no
1,4-Dichlorobenzene	September 28, 2015	< 0.2	µg /L	no
Dichlorodiphenyltrichloroethane (DDT) + metabolites	September 28, 2015	< 0.01	µg /L	no
1,2-Dichloroethane	September 28, 2015	< 0.1	µg /L	no
1,1-Dichloroethylene (vinylidene chloride)	September 28, 2015	< 0.1	µg /L	no
Dichloromethane	September 28, 2015	< 0.3	µg /L	no
2,4 Dichlorophenol 2,4	September 28, 2015	< 0.1	µg /L	no

2,4-Dichlorophenoxy acetic acid (2,4-D)	September 28, 2015	< 5	µg /L	no
Diclofop-methyl	September 28, 2015	< 0.5	µg /L	no
Dimethoate	September 28, 2015	< 1	µg /L	no
Dinoseb	September 28, 2015	< 0.5	µg /L	no
Diquat	September 28, 2015	< 5	µg /L	no
Diuron	September 28, 2015	< 5	µg /L	no
Glyphosate	September 28, 2015	< 25	µg /L	no
Heptachlor + Heptachlor Epoxide	September 28, 2015	< 0.1	µg /L	no
Lindane (Total)	September 28, 2015	< 0.1	µg /L	no
Malathion	September 28, 2015	< 5	µg /L	no
Methoxychlor	September 28, 2015	< 0.1	µg /L	no
Metolachlor	September 28, 2015	< 3	µg /L	no
Metribuzin	September 28, 2015	< 3	µg /L	no
Monochlorobenzene	September 28, 2015	< 0.2	µg /L	no
Paraquat	September 28, 2015	< 1	µg /L	no
Parathion	September 28, 2015	< 3	µg /L	no
Pentachlorophenol	September 28, 2015	< 0.1	µg /L	no
Phorate	September 28, 2015	< 0.3	µg /L	no
Picloram	September 28, 2015	< 5	µg /L	no
Polychlorinated Biphenyls(PCB)	September 28, 2015	< 0.05	µg /L	no
Prometryne	September 28, 2015	< 0.1	µg /L	no
Simazine	September 28, 2015	< 0.5	µg /L	no
THM	October 27, 2015	62.2	µg /L	no
Temephos	September 28, 2015	< 10	µg /L	no
Terbufos	September 28, 2015	< 0.3	µg /L	no
Tetrachloroethylene	September 28, 2015	< 0.2	µg /L	no
2,3,4,6-Tetrachlorophenol	September 28, 2015	< 0.1	µg /L	no
Triallate	September 28, 2015	< 10	µg /L	no
Trichloroethylene	September 28, 2015	< 0.1	µg /L	no
2,4,6-Trichlorophenol	September 28, 2015	< 0.1	µg /L	no
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	September 28, 2015	< 10	µg /L	no
Trifluralin	September 28, 2015	< 0.5	µg /L	no
Vinyl Chloride	September 28, 2015	< 0.2	µg /L	no

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample
none			

Prepared by Martin Perron  
Revised by Richard Guertin