## 2017 Section 11 Annual Report

**Dubreuilville Drinking-Water System** 

February 2018

Prepared by the



#### **Section 11 ANNUAL REPORT**

Drinking-Water System Number:
Drinking-Water System Name:
Drinking-Water System Owner:
Drinking-Water System Category:
Period being reported:

210001442	
Dubreuilville Well Supply	
The Corporation of the Township of Dubreuilville	
Large Municipal Residential Drinking Water-System	
January 1 – December 31, 2017	

<u>Complete if your Category is Large Municipal</u> Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [ X ]

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

Yes [ ] No [X]

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

**Township of Dubreuilville** 23, rue des Pins Dubreuilville, ON

**POS 1BO** 

Complete for all other Categories.

Number of Designated Facilities served:

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?
Yes [ ] No [ ]

Number of Interested Authorities you report to:

N/A

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?

Yes [ ] No [ ]

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	N/A

## 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	ſ	1	No	ſ	1

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

[ ] Public access/notice via the web	
[X] Public access/notice via Government Office (Municipal)	
[X] 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**

The Corporation of the Township of Dubreuilville receives its municipal potable water from a well system that was built in 1985. The system underwent significant upgrades to the treatment and pumphouse in 2005.

The Dubreuilville well supply system is comprised of the following:

- Well #1 is located beneath the addition to the pumphouse that was built in 2005. This well is not available in standby mode, however, when needed, can be manually initiated by an operator.
- Well #2 is also located beneath the pumphouse and is the well that is operated on a regular basis to deliver the municipal potable water to the community.
- There is an installation of an Ultraviolet (UV) disinfection system within the existing pump house which consists of two (2) UV reactors each rated for a designed flow of 31.8 L/sec
- Chlorine is added to the water as it leaves the pumphouse and contact time to achieve the appropriate CT is accomplished in 60m / 300mm main located between the pumphouse and the first service connection
- The distribution system includes an in-ground 1,215m<sup>3</sup> reservoir and services 38 fire hydrants and approximately 320 service connections
- Operation of the well pumps is controlled by the level in the reservoir which has an emergency storage capacity of approximately 2.5 days at normal flow conditions

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

#### Were any significant expenses incurred to?

[]	Install required equipment
[X]	Repair required equipment
[]	Replace required equipment

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

Install	Repair	Replace	Description	Expense
	х		Swabbing	\$23,000
	х		Breakdown maintenance (main break support)	\$9,900
	х		UV service	\$6,153

# 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
14-Feb-17	Other observation – Low pressure for water main repair affecting six residences	(10)	ě	Repair, flush, take two sets of bacteriological samples.	21-Feb-17
28-Mar-17	Physical/Chemical – low chlorine residual	÷ į	I.	Sodium hypochlorite pump in calibration mode. No chlorination, pump lock out but suspect may have unchlorinated water in distribution, BWA issued. Restart pump and two sets of bacteriological	3-Apr-17

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				samples.	
8-May-17	Physical/Chemical – inaccurate chlorine data from distribution analyzer due to reduced flow from service line repair	9	-	Service line repaired, full pressure and flow restored after repair was completed. Chlorine analyzer reading and recording correctly.	9-May-17
9-May-17	Other Observation – Low pressure for water main repair.	Sir.	-	Repair, flush, take two bacteriological samples.	15-May-17

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 #)
Raw					
Well #1	50	<1 -<1	<1-<1	N/A	N/A
Well #2	50	<1 - <1	<1-<1	N/A	N/A
Treated	52	0-0	0-0	51	0-16
Distribution	104	0-0	0-0	51	0 – 20

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 #)
Turbidity*		
Raw Well #1	12	0.31 – 0.93 NTU
Raw Well #2	12	0.24 – 0.66 NTU
Treated	8760	0.00 – 4.996 NTU
Chlorine*		
Treated	8760	0.00 – 5.00
Distribution	8760	0.00 – 4.999
Fluoride (If the DWS provides fluoridation)	N/A	N/A

**NOTE**: For continuous monitors use 8760 as the number of samples.

\* Turbidity & chlorine Min/Max (lows/highs) are due to planned maintenance and not plant upset.

**NOTE**: Record the unit of measure if it is **not** milligrams per litre.

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
N/A	N/A	N/A	N/A	N/A

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	24-Jan-2017	< 0.6	μg/L	No
Arsenic	24-Jan-2017	< 1.0	μg/L	No
Barium	24-Jan-2017	86.0	μg/L	No
Boron	24-Jan-2017	< 50.0	μg/L	No
Cadmium	24-Jan-2017	< 0.1	μg/L	No
Chromium	24-Jan-2017	< 1.0	μg/L	No
*Lead	Refer to Summary Table Below			
Mercury	24-Jan-2017	<0.1	μg/L	No
Selenium	24-Jan-2017	<1.0	μg/L	No
Sodium	13-Jan-2014	15	mg/L	No
Uranium	24-Jan-2017	6.1	μg/L	No
Fluoride	13-Jan-2014	<0.030	mg/L	No
	24-Jan-2017	<0.010	mg/L	No
Nitrite	3-May-2017	<0.010	mg/L	No
Mitrite	6-July-2017	<0.010	mg/L	No
	27-Sept-2017	<0.010	mg/L	No
	24-Jan-2017	1.28	mg/L	No
Nitrate	3-May-2017	1.14	mg/L	No
witrate	6-July-2017	1.37	mg/L	No
	27-Sept-2017	1.54	mg/L	No

<sup>\*</sup>only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

#### 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	N/A	N/A	N/A
Distribution	N/A	N/A	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	24-Jan-2017	< 0.1	μg/L	No
Atrazine + N-dealkylated metobolites	24-Jan-2017	< 0.2	μg/L	No
Azinphos-methyl	24-Jan-2017	< 0.1	μg/L	No
Benzene	24-Jan-2017	< 0.5	μg/L	No
Benzo(a)pyrene	24-Jan-2017	< 0.01	μg/L	No
Bromoxynil	24-Jan-2017	< 0.2	μg/L	No
Carbaryl	24-Jan-2017	< 0.2	μg/L	No
Carbofuran	24-Jan-2017	< 0.2	μg/L	No
Carbon Tetrachloride	24-Jan-2017	< 0.2	μg/L	No
Chlorpyrifos	24-Jan-2017	< 0.1	μg/L	No
Diazinon	24-Jan-2017	< 0.1	μg/L	No
Dicamba	24-Jan-2017	< 0.2	μg/L	No
1,2-Dichlorobenzene	24-Jan-2017	< 0.5	μg/L	No
1,4-Dichlorobenzene	24-Jan-2017	< 0.5	μg/L	No
1,2-Dichloroethane	24-Jan-2017	< 0.5	μg/L	No
1,1-Dichloroethylene (vinylidene chloride)	24-Jan-2017	< 0.5	μg/L	No
Dichloromethane	24-Jan-2017	< 5.0	μg/L	No
2-4 Dichlorophenol	24-Jan-2017	< 0.3	μg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	24-Jan-2017	< 0.2	μg/L	No
Diclofop-methyl	24-Jan-2017	< 0.2	μg/L	No
Dimethoate	24-Jan-2017	< 0.1	μg/L	No
Diquat	24-Jan-2017	< 1.0	μg/L	No

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Diuron	24-Jan-2017	< 1.0	μg/L	No
Glyphosate	24-Jan-2017	< 5.0	μg/L	No
Haloacetic acids (HAA)*	27-Sept-2017	9.7	/1	Na
(NOTE: show latest annual average)	2017 Average	17.4	μg/L	No
Malathion	24-Jan-2017	< 0.1	μg/L	No
Metolachlor	24-Jan-2017	< 0.1	μg/L	No
Metribuzin	24-Jan-2017	< 0.1	μg/L	No
Monochlorobenzene	24-Jan-2017	< 0.5	μg/L	No
Paraquat	24-Jan-2017	< 1.0	μg/L	No
Pentachlorophenol	24-Jan-2017	< 0.5	μg/L	No
Phorate	24-Jan-2017	< 0.1	μg/L	No
Picloram	24-Jan-2017	< 0.4	μg/L	No
Polychlorinated Biphenyls(PCB)	24-Jan-2017	< 0.035	μg/L	No
Prometryne	24-Jan-2017	< 0.1	μg/L	No
Simazine	24-Jan-2017	< 0.1	μg/L	No
тнм	27-Sept-2017	19.7	μg/L	No
(NOTE: show latest annual average)	2017 Average	26.6	μg/L	No
Terbufos	24-Jan-2017	< 0.2	μg/L	No
Tetrachloroethylene	24-Jan-2017	< 0.5	μg/L	No
2,3,4,6-Tetrachlorophenol	24-Jan-2017	< 0.5	μg/L	No
Triallate	24-Jan-2017	< 0.1	μg/L	No
Trichloroethylene	24-Jan-2017	< 0.5	μg/L	No
2,4,6-Trichlorophenol	24-Jan-2017	< 0.5	μg/L	No
Trifluralin	24-Jan-2017	< 0.1	μg/L	No
Vinyl Chloride	24-Jan-2017	< 0.2	μg/L	No
МСРА	24-Jan-2017	< 0.2	μg/L	No

<sup>\*</sup>Parameter exceedance not reportable until 2020

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
N/A	N/A	N/A	N/A