

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

Section 11. ANNUAL REPORT.

Drinking-Water System Number:	210000728
Drinking-Water System Name:	North Dundas Drinking Water System
Drinking-Water System Owner:	Township of North Dundas
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1 to December 31, 2017

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Available at the Township of North Dundas municipal office located at 636 St. Lawrence Street, Winchester, Ontario and on their website: www.northdundas.com</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to:</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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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

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 [] N/A [x]

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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

The North Dundas Drinking Water System consists of eight (8) groundwater production wells, five (5) pump houses each with chlorine disinfection equipment, two (2) storage reservoirs, and a distribution system consisting of two (2) elevated storage tanks and approximately 41.5 km of distribution piping. Sodium hypochlorite is used to provide primary and secondary disinfection.

List all water treatment chemicals used over this reporting period

Sodium hypochlorite was used at an average dosage rate of 3.35 mg/L.

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

- Repaired 3 watermain breaks on County Rd. 3 – Well #7 transmission line (Winchester)
- Repaired watermain at corner of Queen St. and Ottawa St. (Winchester)
- Repaired watermain break on Highway 31 (Winchester)
- Repaired service box on Elizabeth St. (Chesterville)
- Repaired service on King St. (Chesterville)
- Purchased pump motor for Well #5 (Winchester)
- Repaired electrical cable on Well #5 (Winchester)
- Replaced high lift pump and motor at Reservoir (Winchester)
- Replaced pump motor, installed transducer and modified piping on Well #6 (Winchester)
- Repaired unit heater at Reservoir (Winchester)
- Replaced heater at Tower (Winchester)
- Replaced block heater on generator at Reservoir (Chesterville)
- Replaced generator batteries (both reservoirs & Winchester Well #6)
- Rebuilt 16 fire hydrants
- Repaired/replaced curb stops and main valves
- Installed cathodic protection
- Purchased chlorine pump repair kits
- Purchased chlorine analyzer for Well #6 (Winchester)
- Replaced UPS batteries
- Performed electrical and instrumentation upgrades

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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
01/30/2017	Sodium	34.3	mg/L	Resample	02/06/2017

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

	Number of Samples	Range of <i>E. coli</i> Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	385	0 - 1	0 - 45	n/a	n/a
Treated	229	0 - 0	0 - 0	229	0 - 24
Distribution	208	0 - 0	0 - 0	104	0 - 49

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	90	0.06 - 0.56 NTU
Treated Chlorine	8760	0.50 - 5.00 mg/L
Distribution Chlorine	8760	0.45 - 2.08 mg/L

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

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				

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

Parameter	Minimum Sample Date	Maximum Sample Date	Minimum Value	Maximum Value	Unit of Measure	Exceedance
Antimony	01/21/2015	01/21/2015	<0.0001	<0.0001	mg / L	No
Arsenic	01/21/2015	01/21/2015	0.0008	0.0029	mg / L	No
Barium	01/21/2015	01/21/2015	0.060	0.146	mg / L	No
Boron	01/21/2015	01/21/2015	0.014	0.384	mg / L	No
Cadmium	01/21/2015	01/21/2015	<0.00002	0.00002	mg / L	No
Chromium	01/21/2015	01/21/2015	<0.002	<0.002	mg / L	No
*Lead	n/a	n/a	n/a	n/a	mg / L	No
Mercury	01/21/2015	01/21/2015	<0.00002	<0.00002	mg / L	No
Selenium	01/21/2015	01/21/2015	0.001	0.007	mg / L	No
Sodium	02/06/2017	02/06/2017	8.42	121	mg / L	Yes
Uranium	01/21/2015	01/21/2015	0.00037	0.001	mg / L	No
Fluoride	02/06/2017	02/06/2017	0.09	0.28	mg / L	No
Nitrite	01/03/2017	07/05/2017	<0.003	<0.10	mg / L	No
Nitrate	04/03/2017	01/03/2017	<0.006	0.398	mg / L	No

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*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	8	<0.01 - 0.1 µg/L	0

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	01/21/2015	<0.3	µg / L	No
Aldicarb	01/21/2015	<3.0	µg / L	No
Aldrin + Dieldrin	01/21/2015	<0.02	µg / L	No
Azinphos-methyl	01/21/2015	<1.0	µg / L	No
Bendiocarb	01/21/2015	<3.0	µg / L	No
Benzene	01/21/2015	<0.5	µg / L	No
Benzo(a)pyrene	01/21/2015	<0.005	µg / L	No
Bromoxynil	01/21/2015	<0.3	µg / L	No
Carbaryl	01/21/2015	<3.0	µg / L	No
Carbofuran	01/21/2015	<1.0	µg / L	No
Carbon Tetrachloride	01/21/2015	<0.2	µg / L	No
Chlordane (Total)	01/21/2015	<0.04	µg / L	No
Chlorpyrifos	01/21/2015	<0.5	µg / L	No
Cyanazine	01/21/2015	<0.5	µg / L	No
Diazinon	01/21/2015	<1.0	µg / L	No
Dicamba	01/21/2015	<5.0	µg / L	No
1,2-Dichlorobenzene	01/21/2015	<0.1	µg / L	No
1,4-Dichlorobenzene	01/21/2015	<0.2	µg / L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	01/21/2015	<0.01	µg / L	No
1,2-Dichloroethane	01/21/2015	<0.1	µg / L	No
Dichloromethane	01/21/2015	<0.3	µg / L	No
2,4-Dichlorophenol	01/21/2015	<0.1	µg / L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	01/21/2015	<5.0	µg / L	No
Diclofop-methyl	01/21/2015	<0.5	µg / L	No
Dimethoate	01/21/2015	<1.0	µg / L	No
Dinoseb	01/21/2015	<0.5	µg / L	No
Diquat	01/21/2015	<5.0	µg / L	No
Diuron	01/21/2015	<5.0	µg / L	No
Glyphosate	01/21/2015	<25.0	µg / L	No
Heptachlor + Heptachlor Epoxide	01/21/2015	<0.1	µg / L	No
Lindane (Total)	01/21/2015	<0.1	µg / L	No
Malathion	01/21/2015	<5.0	µg / L	No
Methoxychlor	01/21/2015	<0.1	µg / L	No
Metolachlor	01/21/2015	<3.0	µg / L	No

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Metribuzin	01/21/2015	<3.0	µg / L	No
Paraquat	01/21/2015	<1.0	µg / L	No
Parathion	01/21/2015	<3.0	µg / L	No
Pentachlorophenol	01/21/2015	<0.3	µg / L	No
Phorate	01/21/2015	<0.3	µg / L	No
Picloram	01/21/2015	<5.0	µg / L	No
Polychlorinated Biphenyls(PCB)	01/21/2015	<0.05	µg / L	No
Prometryne	01/21/2015	<0.1	µg / L	No
Simazine	01/21/2015	<0.5	µg / L	No
Temephos	01/21/2015	<10.0	µg / L	No
Terbufos	01/21/2015	<0.3	µg / L	No
Tetrachloroethylene	01/21/2015	<0.2	µg / L	No
2,3,4,6-Tetrachlorophenol	01/21/2015	<0.1	µg / L	No
Triallate	01/21/2015	<10.0	µg / L	No
Trichloroethylene	01/21/2015	<0.1	µg / L	No
2,4,6-Trichlorophenol	01/21/2015	<0.1	µg / L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	01/21/2015	<10.0	µg / L	No
Trifluralin	01/21/2015	<0.5	µg / L	No
Vinyl Chloride	01/21/2015	<0.2	µg / L	No

Distribution Water Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
THM (NOTE: show latest annual average)	10/16/17	29.1	µg / L	No
HAA (NOTE: show latest annual average)	10/16/17	8.9	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
n/a			

North Dundas Drinking Water System
O. Reg. 170/03 Schedule 22 - Summary Report for Municipalities

This report is a summary of water quality information for the North Dundas Drinking Water System, published in accordance with Schedule 22 of Ontario's Drinking Water Systems Regulation (O. Reg. 170/03) for the reporting period of January 1, 2017 to December 31, 2017. North Dundas' 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 Township of North Dundas.

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;
- In the case of a drinking-water system owned by a municipal service board established under section 195 of the Municipal Act, 2001, the members of the municipal service board; or
- In the case of a drinking-water system owned by a corporation, the board of directors of the corporation.

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	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)
Safe Drinking Water Act	n/a			
Ontario Regulation 170/03	n/a			
DWWP # 180-201	n/a			
MDWL # 180-101	n/a			
PTTW # 3380-AC3QF9	n/a			
PTTW # 0088-9C3JG4	n/a			
PTTW # 0816-838SXR	Condition 3.2 - maximum flow rate	05/16/2017	Exceedance was caused by drop in pressure associated with a watermain break. Well shut down upon discovery of the break.	Complete
PTTW # 4175-9C3GPW	n/a			
PTTW # 2181-83S8E	n/a			
Provincial Officer's Order	n/a			

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:

- a) 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.
- b) A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval.

Attached please find the 2017 Performance Assessment Report and 2017 Annual Records of Water Taking which contain 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, 2018.

ONTARIO CLEAN WATER AGENCY **WATER PLANT PERFORMANCE ASSESSMENT REPORT**

MUNICIPALITY: NORTH DUNDAS
 PROJECT: NORTH DUNDAS DRINKING WATER SYSTEM
 WORKS NUM.: 210000728

YEAR: 2017
 WATER SOURCE: GROUNDWATER
 DESIGN CAPACITY: 8,884 m³/d

DESCRIPTION: AN EIGHT WELL PUMPING SYSTEM WITH TWO STORAGE RESERVOIRS AND TWO ELEVATED STORAGE TANKS
DISINFECTION IS WITH SODIUM HYPOCHLORITE.

MONTH	SYSTEM FLOWS (TREATED)			TREATED		DISTRIBUTION		BACTI (INDICATE NO. OF SAMPLES)				RAW WATER	
	TOTAL	AVG DAY	MAX DAY	MIN FREE	MAX FREE	MIN FREE	MAX FREE	E.coli, Total Collform, HPC					
	FLOW (m ³)	FLOW (m ³)	FLOW (m ³)	CL ₂ RESID. (mg/L)	CL ₂ RESID. (mg/L)	CL ₂ RESID. (mg/L)	CL ₂ RESID. (mg/L)	Safe		Adverse		E. coli	
								TREAT	DIST	TREAT	DIST	ABSENT	PRESENT
JAN	64,810	2,092	3,389	0.77	3.70	0.45	1.64	63	50	0	0	36	0
FEB	59,497	2,125	3,307	0.58	3.80	0.93	1.71	57	40	0	0	31	0
MAR	68,465	2,212	3,648	0.93	4.76	0.65	2.08	48	40	0	0	28	0
APR	72,475	2,416	3,532	0.78	5.00	0.81	1.92	48	40	0	0	28	1
MAY	80,933	2,611	4,275	0.50	2.75	0.95	1.58	60	50	0	0	35	0
JUN	80,265	2,676	3,863	0.50	5.00	0.76	1.59	48	40	0	0	28	0
JUL	82,190	2,651	3,594	0.59	3.41	0.69	1.49	60	50	0	0	35	0
AUG	80,806	2,607	4,233	0.68	5.00	0.70	1.48	60	40	0	0	32	0
SEP	75,144	2,505	4,025	0.68	4.54	0.72	1.39	60	40	0	0	32	0
OCT	78,220	2,523	4,599	0.51	5.00	0.48	1.42	75	50	0	0	40	0
NOV	70,886	2,363	3,498	0.60	3.14	0.71	1.89	60	40	0	0	32	0
DEC	74,097	2,390	3,463	0.55	4.51	0.60	1.76	48	40	0	0	28	0
TOTAL	887,788							687	520	0	0	385	1
AVG		2,431											
MIN				0.50		0.45							
MAX			4,599		5.00		2.08						
CRITERIA				Min CT		0.05	4.00						

COMMENTS: MAX. DAY FLOWS INCLUDE DAYS HYDRANTS WERE FLUSHED (SPRING & FALL)

Facility Flow Summary

Drinking-Water System Number: 210000728
 Drinking-Water System Name: NORTH DUNDAS DRINKING WATER SYSTEM
 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Large Municipal Residential
 Municipal Drinking Water License: 180-101
 Period being reported: January 1 - December 31, 2017

Raw Water (Source Name) Raw Water
 Source Type: Raw Well #1 Winchester
 Drinking Water Permit to Take Water No: Drilled
 4175-9C3GPW

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	4265.00	137.58	183.00	8.21
Feb	4594.00	164.07	242.00	8.16
Mar	6161.00	198.74	318.00	8.36
Apr	5928.00	197.60	383.00	7.77
May	6821.00	220.03	374.00	7.79
Jun	6573.00	219.10	323.00	7.96
Jul	6786.00	218.90	312.00	7.68
Aug	5440.00	175.48	309.00	7.93
Sep	5701.00	190.03	334.00	7.75
Oct	5199.00	167.71	314.00	7.76
Nov	4936.00	164.53	208.00	7.77
Dec	3981.00	128.42	243.00	7.78
Total	66385.00			
Avg	5532.08	181.85		
Max	6821.00		383.00	8.36
Criteria			821.00	9.50

Facility Flow Summary

Drinking-Water System Number: 210000728
 Drinking-Water System Name: NORTH DUNDAS DRINKING WATER SYSTEM
 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Large Municipal Residential
 Municipal Drinking Water License: 180-101
 Period being reported: January 1 - December 31, 2017

Raw Water

Raw Water (Source Name) Raw Well #5 Winchester
 Source Type: Drilled
 Drinking Water Permit to Take Water No: 2181-838S8E

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	322.00	10.39	237.00	5.97
Feb	3656.00	130.57	278.00	4.86
Mar	4735.00	152.74	277.00	4.57
Apr	4251.00	141.70	331.00	4.53
May	5056.00	163.10	334.00	4.53
Jun	5124.00	170.80	263.00	4.26
Jul	4772.00	153.94	214.00	4.25
Aug	4271.00	137.77	215.00	4.97
Sep	4347.00	144.90	209.00	5.12
Oct	4175.00	134.68	244.00	4.49
Nov	3549.00	118.30	157.00	4.45
Dec	0.00	0.00	0.00	0.00
Total	44258.00			
Avg	3688.17	121.57		
Max	5124.00		334.00	5.97
Criteria			556.00	6.43

Facility Flow Summary

Drinking-Water System Number: 210000728
 Drinking-Water System Name: NORTH DUNDAS DRINKING WATER SYSTEM
 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Large Municipal Residential
 Municipal Drinking Water License: 180-101
 Period being reported: January 1 - December 31, 2017

Raw Water

Raw Water (Source Name) Raw Well #6 Winchester
 Source Type: Drilled
 Drinking Water Permit to Take Water No: 0088-9C3JG4

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	4822.00	155.55	328.00	7.01
Feb	1628.00	58.14	195.00	7.19
Mar	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	0.00
Jun	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	0.00
Aug	5712.00	184.26	514.00	7.84
Sep	7390.00	246.33	482.00	7.92
Oct	7090.00	228.71	512.00	7.84
Nov	5815.00	193.83	442.00	7.97
Dec	9021.00	291.00	492.00	8.04
Total	41478.00			
Avg	3456.50	113.15		
Max	9021.00		514.00	8.04
Criteria			982.00	11.37

Facility Flow Summary

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 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Large Municipal Residential
 Municipal Drinking Water License: 180-101
 Period being reported: January 1 - December 31, 2017

Raw Water

Raw Water (Source Name) Raw Wellfield #7 Winchester
 Source Type: Drilled
 Drinking Water Permit to Take Water No: 0816-838SXR

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	26197.00	845.06	1326.00	18.73
Feb	21981.00	785.04	1324.00	18.73
Mar	23602.00	761.35	1442.00	18.93
Apr	30367.00	1012.23	1536.00	18.78
May	28048.00	904.77	1440.00	24.25
Jun	30000.00	1000.00	1501.00	18.62
Jul	30163.00	973.00	1440.00	19.93
Aug	24355.00	785.65	1438.00	18.53
Sep	21798.00	726.60	1271.00	18.49
Oct	26617.00	858.61	1476.00	18.73
Nov	23942.00	798.07	1389.00	18.64
Dec	26525.00	855.65	1310.00	20.40
Total	313595.00			
Avg	26132.92	858.84		
Max	30367.00		1536.00	24.25
Criteria			1950.00	22.50

Facility Flow Summary

Drinking-Water System Number: 210000728
 Drinking-Water System Name: NORTH DUNDAS DRINKING WATER SYSTEM
 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Large Municipal Residential
 Municipal Drinking Water License: 180-101
 Period being reported: January 1 - December 31, 2017

Raw Water

Raw Water (Source Name) Raw Well #5 Chesterville
 Source Type: Drilled
 Drinking Water Permit to Take Water No: 3380-AC3QF9

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	13585.00	438.23	507.00	17.18
Feb	11033.00	394.04	454.00	17.15
Mar	12221.00	394.23	486.00	17.17
Apr	12050.00	401.67	486.00	17.19
May	14091.00	454.55	925.00	17.20
Jun	12991.00	433.03	607.00	17.13
Jul	12698.00	409.61	520.00	17.21
Aug	12872.00	415.23	527.00	17.18
Sep	12677.00	422.57	517.00	17.27
Oct	13868.00	447.35	752.00	17.18
Nov	12264.00	408.80	961.00	17.32
Dec	12878.00	415.42	534.00	17.77
Total	153228.00			
Avg	12769.00	419.56		
Max	14091.00		961.00	17.77
Criteria			1960.00	22.73

Facility Flow Summary

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 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Large Municipal Residential
 Municipal Drinking Water License: 180-101
 Period being reported: January 1 - December 31, 2017

Raw Water
 Raw Water (Source Name) Raw Well #6 Chesterville
 Source Type: Drilled
 Drinking Water Permit to Take Water No: 3380-AC3QF9

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (l/sec)
Jan	14191.00	457.77	613.00	21.66
Feb	15393.00	549.75	810.00	21.70
Mar	20722.00	668.45	1068.00	22.21
Apr	19652.00	655.07	897.00	22.26
May	26499.00	854.81	1304.00	22.22
Jun	25090.00	836.33	1166.00	22.19
Jul	27199.00	877.39	1135.00	23.45
Aug	27612.00	890.71	1555.00	22.17
Sep	22843.00	761.43	1263.00	22.65
Oct	20794.00	670.77	1189.00	22.06
Nov	20142.00	671.40	828.00	22.42
Dec	21080.00	680.00	1010.00	22.15
Total	261217.00			
Avg	21768.08	714.49		
Max	27612.00		1555.00	23.45
Criteria			2615.00	30.25

Mr. James Mahoney
Supervisor, Ministry of the Environment and Climate Change
James.Mahoney@ontario.ca

February 8, 2018

Re: Notification of Flow Rate Exceedance - North Dundas DWS - PTTW #0816-838SXR

This letter provides written notification of non-compliance with respect to the flow rate specified under Condition 3.2 of PTTW #0816-838SXR issued for Wellfield #7 located at 13224 Thompson Road, in the Township of North Dundas.

On May 16, 2017 a watermain break along the Well #7 transmission line resulted in the PTTW maximum flow rate being exceeded as follows:

Start Time	End Time	Duration (hh:mm)	Peak Flow Rate (L/min)	PTTW Max. Flow Rate (L/min)
10:21	10:25	00:04	1455	1350
10:30	10:36	00:06	1411	1350

The flow rate exceedances were a direct result of the fluctuation in pressure caused by the watermain break. Operational staff responded on site and shut the well pumps off immediately upon discovery of the break. The concentration of free chlorine in the treated water remained above the minimum required to meet the CT value for disinfection during that time.

If you have any questions or concerns, please contact me at (613) 448-3098.

Sincerely,



Dawn Crump
Process & Compliance Technician
Seaway Valley Cluster

Cc: Angela Rutley, CAO, Township of North Dundas
Dan Belleau, Director of Public Works, Township of North Dundas
Stephane Barbarie, Senior Operations Manager, OCWA
Brenda Beaudoin, Provincial Officer, MOECC