Ministry of the Ministère de Environment l'Environnement

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

Drinking-Water System Number:	210000728
Drinking-Water System Name:	North Dundas DWS
Drinking-Water System Owner:	Township of North Dundas
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1 to December 31, 2014

Complete if your Category is Large Municipal Residential or Small Municipal Residential	Complete for all other Categories.
Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]	Number of Designated Facilities served:
Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No [] Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No [] Number of Interested Authorities you report to:
Available at the Township of North Dundas Office, 636 St. Lawrence Street, Winchester, Ontario and on their website www.northdundas.com	Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []

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]



Ministry of the Ministère de Environment l'Environnemen

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

Indicate how you notified system user	rs that your annual report is available, and is free
of charge.	
[x] Public access/notice via the web	
[x] Public access/notice via Governmen	t Office
[] Public access/notice via a newspape	r
[] Public access/notice via Public Regu	iest

Public access/notice via other method _____

Describe your Drinking-Water System

[] Public access/notice via a Public Library

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 the 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 3.26 mg/L.

Were any significant expenses incurred to?

- [x] Install required equipment
- [x] Repair required equipment
- [x] Replace required equipment

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

Replaced flow control valve at Chesterville Reservoir

Replaced chlorine pump for Chesterville Well #6

Purchased well pump for Chesterville Well #5

Chesterville water tower upgraded to meet safety requirements

Purchased well pump for Winchester Well #5

Rebuilt 16 hydrants

Installed cathodic protection on main valves and service laterals

Rebuilt main valves and repaired curb stops

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
n/a					

Ministry of the Ministère de Environment l'Environnement

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

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	832	0-0	0-4	n/a	n/a
Treated	780	0-0	0-0	260	0-580
Distribution	520	0-0	0-0	106	0-84

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	96	0.09-0.79 NTU
Chlorine	8760	0.22-5.00 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	Maximum	Minimum	Maximum	Unit of	Exceedance
	Sample Date	Sample Date	Value	Value	Measure	
Antimony	01/10/2012	01/10/2012	< 0.0001	0.0037	mg / L	No
Arsenic	01/10/2012	01/10/2012	< 0.001	< 0.001	mg / L	No
Barium	01/10/2012	01/10/2012	0.06	0.12	mg / L	No
Boron	01/10/2012	01/10/2012	0.01	0.69	mg / L	No
Cadmium	01/10/2012	01/10/2012	< 0.0001	< 0.0001	mg / L	No
Chromium	01/10/2012	01/10/2012	< 0.001	0.005	mg / L	No
*Lead	n/a	n/a	n/a	n/a	mg / L	No
Mercury	01/10/2012	01/10/2012	< 0.0001	< 0.0001	mg / L	No
Selenium	01/10/2012	01/10/2012	< 0.001	< 0.005	mg / L	No
Sodium	01/09/2012	01/09/2012	7.82	102	mg / L	No
Uranium	01/10/2012	01/10/2012	< 0.001	0.001	mg / L	No
Fluoride	01/09/2012	01/09/2012	0.08	0.25	mg / L	No
Nitrite	01/06/2014	10/14/2014	< 0.003	< 0.003	mg / L	No
Nitrate	01/06/2014	10/14/2014	< 0.006	2.63	mg / L	No

^{*}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.



Ministry of the Ministère de Environment l'Environnement

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

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	<0.001 mg/L	0	

Summary of Organic parameters sampled during this reporting period or the most

recent sample results

Parameter	Sample	Result	Unit of	Exceedance
Turumeer	Date	Value	Measure	Dacceunice
Alachlor	01/10/2012	<0.5	μg/L	No
Aldicarb	01/10/2012	<5	μg/L	No
Aldrin + Dieldrin	01/10/2012	< 0.012	μg/L	No
Atrazine + N-dealkylated metobolites	01/10/2012	< 0.2	μg/L	No
Azinphos-methyl	01/10/2012	<2	μg/L	No
Bendiocarb	01/10/2012	<2	μg/L	No
Benzene	01/10/2012	< 0.5	μg/L	No
Benzo(a)pyrene	01/10/2012	< 0.01	μg/L	No
Bromoxynil	01/10/2012	< 0.5	μg/L	No
Carbaryl	01/10/2012	<5	μg/L	No
Carbofuran	01/10/2012	<5	μg/L	No
Carbon Tetrachloride	01/10/2012	<0.5	μg/L	No
Chlordane (Total)	01/10/2012	< 0.018	μg/L	No
Chlorpyrifos	01/10/2012	<1	μg/L	No
Cyanazine	01/10/2012	<1	μg/L	No
Diazinon	01/10/2012	<1	μg/L	No
Dicamba	01/10/2012	<1	μg/L	No
1,2-Dichlorobenzene	01/10/2012	< 0.4	μg/L	No
1,4-Dichlorobenzene	01/10/2012	< 0.4	μg/L	No
Dichlorodiphenyltrichloroethane (DDT) +	01/10/2012	< 0.024	μg/L	No
metabolites				
1,2-Dichloroethane	01/10/2012	<0.2	μg/L	No
1,1-Dichloroethylene	01/10/2012	< 0.5	μg/L	No
(vinylidene chloride)				
Dichloromethane	01/10/2012	<4.0	μg/L	No
2-4 Dichlorophenol	01/10/2012	< 0.5	μg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	01/10/2012	<1	μg/L	No
Diclofop-methyl	01/10/2012	< 0.9	μg/L	No
Dimethoate	01/10/2012	<2.5	μg/L	No
Dinoseb	01/10/2012	<1	μg/L	No
Diquat	01/10/2012	<5	μg/L	No
Diuron	01/10/2012	<10	μg/L	No
Glyphosate	01/10/2012	<10	μg/L	No
Heptachlor + Heptachlor Epoxide	01/10/2012	< 0.012	μg/L	No
Lindane (Total)	01/10/2012	< 0.005	μg/L	No
Malathion	01/10/2012	<5	μg/L	No
Methoxychlor	01/10/2012	< 0.024	μg/L	No



Ministry of the Environment l'Environnement

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

Metolachlor	01/10/2012	<0.5	μg/L	No
Metribuzin	01/10/2012	<5	μg/L	No
Monochlorobenzene	01/10/2012	< 0.2	μg/L	No
Paraquat	01/10/2012	<5	μg/L	No
Parathion	01/10/2012	<1	μg/L	No
Pentachlorophenol	01/10/2012	< 0.5	μg/L	No
Phorate	01/10/2012	< 0.5	μg/L	No
Picloram	01/10/2012	<5	μg/L	No
Polychlorinated Biphenyls(PCB)	01/10/2012	<0.1	μg/L	No
Prometryne	01/10/2012	< 0.25	μg/L	No
Simazine	01/10/2012	<1	μg/L	No
THM	10/14/2014	14.3	μg/L	No
(NOTE: show latest annual average)				
Temephos	01/10/2012	<10	μg/L	No
Terbufos	01/10/2012	<0.4	μg/L	No
Tetrachloroethylene	01/10/2012	<0.3	μg/L	No
2,3,4,6-Tetrachlorophenol	01/10/2012	< 0.5	μg/L	No
Triallate	01/10/2012	<1	μg/L	No
Trichloroethylene	01/10/2012	<0.3	μg/L	No
2,4,6-Trichlorophenol	01/10/2012	<0.5	μg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	01/10/2012	<1	μg/L	No
Trifluralin	01/10/2012	<0.4	μg/L	No
Vinyl Chloride	01/10/2012	<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
n/a			