

ANNUAL REPORT**Drinking Water System Number: 220008051****Drinking Water System Name: Newington Water Treatment Plant****Drinking Water System Owner: Township of South Stormont****Drinking Water System Category: Large Municipal Residential****Period being reported: January 1 - December 31, 2007****Is this a Large Municipal Drinking-Water System serving more than 10,000 people? No****If yes, is your annual report available to the public at no charge on a web site on the Internet?****Location of Summary Report required under O.Reg.170/03 section 22.****For Large Municipal Residential or Small Municipal Residential only**

Township of South Stormont, 4949 County Road 18, Ingleside, ON

Number of Designated Facilities served: 0**Any of the following category may be serving a designated facility : large municipal non residential, small municipal non residential, large non municipal non residential, small non municipal non residential, non municipal year round residential, non municipal seasonal residential****Did you provide a copy of your annual report to all Designated Facilities you serve?**

N/A

Number of Interested Authorities reporting to: 0**Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? N/A****Number of Drinking-Water Systems your system is connected to and provides all of its drinking water to: 0****Did you provide a copy of your annual report to all system owners that are connected to you and to whom you provide all of its drinking water? N/A****Indicate how you notified your system users that your annual report is available 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 Newington water works draws groundwater from two wells located within the Newington Fairgrounds. The supply/treatment and storage works (STSW) consists of the two wells and disinfection by sodium hypochlorite.

The wells are operated in series. The first well, known as the “Kraft” well is the primary source of water. It is a dug well which was originally installed in 1937.

In dry periods, when the water level hits a minimum depth in the Kraft Well, the pump in the second well, the “Fairgrounds” well, is activated to pump water to the Kraft Well. The Fairgrounds Well is a drilled well originally installed in 1979.

Treatment

Two series (duty and standby) of 10 micron, 5 micron, and 1 micron “absolute” filters are run in parallel. Each filter train has a differential pressure transmitter and switch connected to a three way solenoid valve. Should the differential pressure exceed 14 m of water (20 psi), the water will be direct to the standby water filter train.

An on-line turbidity analyzer monitors the turbidity from the cartridge filter effluent.

As water exits the plant, it enters a 600 mm x 73 m chlorine contact pipe. At the end of the contact pipe, the chlorine is continuously monitored by an online chlorine analyzer. The treated water is monitored for free chlorine residual and turbidity by online analyzers.

List all water treatment chemicals used over the reporting period.

Sodium Hypochlorite

Where any significant expenses incurred during this reporting period?

Install required equipment: No
 Repair required equipment: No
 Replace required equipment: No

Describe (if yes to any of above)

List any notice(s) in accordance with subsection 18(1) of the Act or section 16-4 of Schedule 16 of O.Reg.170/03 were reported to Spills Action Centre?

Incident Date	Parameter	Result	Corrective Action	Corrective Action Date
Jan 8/07	Low chlorine	0.00mg/l	Reprimed pumps and flushed system	Jan 8/07
Jan 26/07	High turbidity	2.04	Water line burst -	Jan 26/07

			repaired crack in line and changed cartridge filters.	
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Microbiological testing done during the period covered in the report

(Note: Large Municipal Residential may express the general bacteria population as background colony counts on the total coliform membrane filter or as colony counts on a heterotrophic plate count)

	Number of Samples	Range of E.Coli or Fecal Results	Range of Total Coliform Results	Number of Background Samples	Range of Background Results
Raw	52	0-24	0-32		
Treated	52	0-<1	0-<1	52	<2-30
Distribution	96	0-<1	0-<1	38	<1-70

Operational testing done under schedule 7, 8 or 9 during the period covered by this report. (Please indicate range of results if using continuous monitoring devices)

	Number of Samples	Range of Results
Turbidity	8760	0.05-2.04
Treated Chlorine	8760	0.08-4.72
Distribution Chlorine	8760	0.07-2.97
Fluoride (If the drinking-water system provides fluoridation)		

Summary of additional testing and sampling carried out in accordance with the requirement of an approval or order.

Date of order or C of A	Sample Type	Parameter	Number of Samples	Sample Date	Result

Summary of inorganic parameters tested during the period covered in the report or most recent results. (Expressed in mg/L)

Parameter	Sample Date	Result Value	Exceedence
Antimony	06/06/07	<0.0001	
Arsenic	06/06/07	0.0002	
Barium	06/06/07	0.030	
Boron	06/06/07	0.005	
Cadmium	06/06/07	<0.00002	

Chromium	06/06/07	<0.002	
Lead	06/06/07	0.00017	
Mercury	06/06/07	<0.00002	
Selenium	06/06/07	0.0023	
Uranium	06/06/07	0.00034	
Fluoride	06/06/07	0.2	
Sodium	06/06/07	2.8	
Nitrate	14/02/07	2.9	
	06/06/07	2.7	
	13/08/07	3.1	
	22/10/07	3.0	
Nitrite	12/02/07	<0.1	
	06/06/07	<0.1	
	13/08/07	<.01	
	22/10/07	<0.1	

Summary of organic parameters sampled during this reporting period or most recent results. (Expressed in milligrams/L)

Parameter	Sample Date	Result Value	Exceed.
Alachlor	06/06/07	<0.0003	
Aldicarb	06/06/07	<.003	
Aldrin + Dieldrin	06/06/07	<0.00002	
Atrazine + N-dealkylated metabolites	06/06/07	<0.0005	
Azinphos-methyl	06/06/07	<.001	
Bendiocarb	06/06/07	<.003	
Benzene	06/06/07	<0.0005	
Benzo(a)pyrene	06/06/07	<0.000005	
Bromoxynil	06/06/07	<0.0003	
Carbaryl	06/06/07	<.003	
Carbofuran	06/06/07	<.001	
Carbon Tetrachloride	06/06/07	<0.0002	
Chlordane (Total)	06/06/07	<0.00004	
Chlorpyrifos	06/06/07	<0.0005	
Cyanazine	06/06/07	<0.0005	
Diazinon	06/06/07	<.001	
Dicamba	06/06/07	<.005	
1,2-Dichlorobenzene	06/06/07	<0.0001	
1,4-Dichlorobenzene	06/06/07	<0.0002	
Dichlorodiphenyltrichloroethane (DDT) + metabolites	06/06/07	<0.0001	
1,2-Dichloroethane	06/06/07	<0.0001	
1,1-Dichloroethylene (vinylidene chloride)	06/06/07	<0.0001	
Dichloromethane	06/06/07	<0.0003	

Parameter	Sample Date	Result Value	Exceed.
Glyphosate	06/06/07	<.025	
Heptachlor + Heptachlor Epoxide	06/06/07	<0.001	
Linadane (Total)	06/06/07	<0.001	
Malathion	06/06/07	<.005	
Methoxychlor	06/06/07	<0.001	
Metolachlor	06/06/07	<.003	
Metribuzin	06/06/07	<.003	
Monochlorobenzene	06/06/07	<0.0002	
Paraquat	06/06/07	<.001	
Parathion	06/06/07	<.001	
Pentachlorophenol	06/06/07	<0.0001	
Phorate	06/06/07	<0.0003	
Picloram	06/06/07	<.005	
Polychlorinated Biphenyls(PCB)	06/06/07	<0.00005	
Promethyne	06/06/07	<0.0001	
Simazine	06/06/07	<0.0005	
Temephos	06/06/07	<.001	
Terbufos	06/06/07	<0.0003	
Tetrachloroethylene (perchloroethylene)	06/06/07	<0.0002	
2,3,4,6-Tetrachlorophenol	06/06/07	<0.0001	
Triallate	06/06/07	<.001	
Trichloroethylene	06/06/07	<0.0001	
2,4,6-Trichlorophenol	06/06/07	<0.0001	

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2-4 Dichlorophenol	06/06/07	>0.0001		2,4,5-Trichlorophenoxy acetic acid(2,4,5-T)	06/06/07	<.001	
2,4-Dichlorophenoxy acetic acid (2,4-D)	06/06/07	<.005		Trifluralin	06/06/07	<.001	
Diclofop-methyl	06/06/07	<0.0004		Vinyl Chloride	06/06/07	<0.002	
Dimethoate	06/06/07	<.001		THM	12/02/07	0.0003	
Dinoseb	06/06/07	<0.0005			06/06/07	0.0002	
Diquat	06/06/07	<.005			13/08/07	0.0004	
Diuron	06/06/07	<.0005			22/10/07	0.0007	

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	Sample Date	MAC or IMAC

Applies to the following category : large municipal residential, small municipal residential, large municipal non residential, small municipal non residential, large non municipal non residential

Note: if the sampling and testing frequency has been increased for any parameter in this reporting period, please insert additional rows to the tables to accommodate all the test results.