

Part III Form 2

Section 11. ANNUAL REPORT.

Drinking-Water System Number:	210001665
Drinking-Water System	Dowling Wells and Distribution System
Drinking-Water System Owner:	City of Greater Sudbury
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	From 2009-01-01 To 2009-12-31

<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 <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>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"/></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;"> <p>www.greatersudbury.ca TDS-Engineering Department</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input type="text" value="0"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Number of Interested Authorities you report to: <input type="text" value="0"/></p> <p>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 checked="" type="checkbox"/></p>
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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

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/Citizen Service Centre
- Public access/notice via other method

Describe your Drinking-Water System

The Dowling Wells and Distribution System encompasses all municipal distribution within Dowling. The system includes Dowling well #1 (Riverside) located on the north side of Riverside Dr. approximately 145m east of Lionel Avenue, Dowling well #2 (Lionel) located on the northwest corner of the intersection of Riverside Dr. and Lionel Avenue and Dowling Tank located on the south side of Hwy. 144, approximately 200m east of Houle St. Each of the wells are housed in individual structures. The wells take water from an unconfined aquifer in a primarily sand and gravel formation. The discharge at each well site undergoes treatment in the form of disinfection by chlorination, Ultra-Violet irradiation, and fluoridation before it enters the distribution system. Continuous analyzers for free chlorine residual, fluoride, and UV equipment are monitored by a PLC. A standby power generator with an automatic transfer switch is located at Lionel well and supplies power to both wells.

List all water treatment chemicals used over this reporting period

Chlorine Gas UN#1017, Hydrofluosilicic Acid UN#1778

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

Engineering and Misc. tank repairs: \$55,000.00
Chlorine switch over equipment: \$60,000.00

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

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: LIONEL WELL#2					
	53	0 to 0	0 to 0		
Raw: RIVERSIDE WELL#1					
	51	0 to 0	0 to 8		
Treated: LIONEL WELL					
	52	0 to 0	0 to 0	52	0 to 1500
Treated: RIVERSIDE WELL					
	49	0 to 0	0 to 0	49	0 to 20
Distribution					
	169	0 to 0	0 to 0	48	0 to 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 #)
Chlorine Residual Distribution System	8,760	0.41 - 2.84 mg/L

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

LIONEL WELL

Turbidity	8,760	0.01 - 2.00 NTU
Chlorine	8,760	0.49 - 2.78 mg/L
Fluoride (If the DWS provides fluoridation)	8,760	0.20 - 1.25 mg/L

RIVERSIDE WELL

Turbidity	8,760	0.00 - 1.99 NTU
Chlorine	8,760	0.54 - 3.30 mg/L
Fluoride (If the DWS provides fluoridation)	8,760	0.20 - 0.65 mg/L

*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 or order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Lead	2009/12/07	0.0011	mg/L	No

LIONEL WELL

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2009/12/10	0.0005	mg/L	No
Arsenic	2009/12/10	0.001	mg/L	No
Barium	2009/12/10	0.0219	mg/L	No
Boron	2009/12/10	0.014	mg/L	No
Cadmium	2009/12/10	0.0001	mg/L	No
Chromium	2009/12/10	0.001	mg/L	No
Mercury	2009/12/10	0.00001	mg/L	No
Selenium	2009/12/10	0.001	mg/L	No
Uranium	2009/12/10	0.001	mg/L	No
Fluoride	2004/01/19	0.56	mg/L	No
Nitrate	2009/03/18	0.43	mg/L	No
	2009/06/18	0.56	mg/L	No
	2009/09/17	0.55	mg/L	No
	2009/12/16	0.80	mg/L	No
Nitrite	2009/03/18	0.05	mg/L	No
	2009/06/18	0.05	mg/L	No
	2009/09/17	0.05	mg/L	No
	2009/12/16	0.01	mg/L	No
Sodium	2006/08/22	28.10	mg/L	Yes

RIVERSIDE WELL

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2009/12/21	0.0005	mg/L	No
Arsenic	2009/12/21	0.001	mg/L	No
Barium	2009/12/21	0.0077	mg/L	No
Boron	2009/12/21	0.002	mg/L	No
Cadmium	2009/12/21	0.0001	mg/L	No
Chromium	2009/12/21	0.0012	mg/L	No
Mercury	2009/12/21	0.00001	mg/L	No
Selenium	2009/12/21	0.001	mg/L	No
Uranium	2009/12/21	0.001	mg/L	No
Fluoride	2004/01/19	0.64	mg/L	No
Nitrate	2009/03/18	0.25	mg/L	No
	2009/06/18	0.47	mg/L	No
	2009/09/17	0.64	mg/L	No
	2009/12/17	0.30	mg/L	No

Nitrite	2009/03/18	0.05	mg/L	No
	2009/06/18	0.05	mg/L	No
	2009/09/17	0.05	mg/L	No
	2009/12/17	0.01	mg/L	No
Sodium	2005/12/14	14.10	mg/L	No

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

Location Type	Number of Samples	Range of Lead Results (min#) - (max#)	Number of Exceedances
Plumbing	33	0.001 - 0.0013 mg/L	0
Distribution	7	0.001 - 0.0011 mg/L	0

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
THM (NOTE: show latest annual average)	2009	0.0058	mg/L	No

LIONEL WELL

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2009/12/10	0.0005	mg/L	No
Aldicarb	2009/12/10	0.00054	mg/L	No
Aldrin + Dieldrin	2009/12/10	0.000004	mg/L	No
Atrazine + N-dealkylated metabolites	2009/12/10	0.0009	mg/L	No
Azinphos-methyl	2009/12/10	0.0003	mg/L	No
Bendiocarb	2009/12/10	0.0011	mg/L	No
Benzene	2009/12/10	0.00025	mg/L	No
Benzo(a)pyrene	2009/12/10	0.000005	mg/L	No
Bromoxynil	2009/12/10	0.0005	mg/L	No
Carbaryl	2009/12/10	0.0011	mg/L	No
Carbofuran	2009/12/10	0.0011	mg/L	No
Carbon Tetrachloride	2009/12/10	0.00025	mg/L	No
Chlordane (Total)	2009/12/10	0.000004	mg/L	No
Chlorpyrifos	2009/12/10	0.0003	mg/L	No
Cyanazine	2009/12/10	0.0004	mg/L	No
Diazinon	2009/12/10	0.0003	mg/L	No
Dicamba	2009/12/10	0.0002	mg/L	No
1,2-Dichlorobenzene	2009/12/10	0.00025	mg/L	No
1,4-Dichlorobenzene	2009/12/10	0.00025	mg/L	No
(DDT) + metabolites	2009/12/10	0.000005	mg/L	No
1,2-Dichloroethane	2009/12/10	0.00025	mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	2009/12/10	0.00025	mg/L	No
Dichloromethane	2009/12/10	0.00025	mg/L	No
2-4 Dichlorophenol	2009/12/10	0.001	mg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2009/12/10	0.0002	mg/L	No

Diclofop-methyl	2009/12/10	0.0002	mg/L	No
Dimethoate	2009/12/10	0.0002	mg/L	No
Dinoseb	2009/12/10	0.00005	mg/L	No
Diquat	2009/12/10	0.007	mg/L	No
Diuron	2009/12/10	0.0054	mg/L	No
Glyphosate	2009/12/10	0.02	mg/L	No
Heptachlor + Heptachlor Epoxide	2009/12/10	0.000004	mg/L	No
Linadane (Total)	2009/12/10	0.0000003	mg/L	No
Malathion	2009/12/10	0.0002	mg/L	No
Methoxychlor	2009/12/10	0.00000081	mg/L	No
Metolachlor	2009/12/10	0.0002	mg/L	No
Metribuzin	2009/12/10	0.0002	mg/L	No
Monochlorobenzene	2009/12/10	0.00025	mg/L	No
Paraquat	2009/12/10	0.001	mg/L	No
Parathion	2009/12/10	0.0003	mg/L	No
Pentachlorophenol	2009/12/10	0.001	mg/L	No
Phorate	2009/12/10	0.0003	mg/L	No
Picloram	2009/12/10	0.00005	mg/L	No
Polychlorinated Biphenyls(PCB)	2009/12/10	0.000003	mg/L	No
Prometryne	2009/12/10	0.0002	mg/L	No
Simazine	2009/12/10	0.0005	mg/L	No
Temephos	2009/12/10	0.015	mg/L	No
Terbufos	2009/12/10	0.0003	mg/L	No
Tetrachloroethylene	2009/12/10	0.00025	mg/L	No
2,3,4,6-Tetrachlorophenol	2009/12/10	0.001	mg/L	No
Triallate	2009/12/10	0.0005	mg/L	No
Trichloroethylene	2009/12/10	0.00025	mg/L	No
2,4,6-Trichlorophenol	2009/12/10	0.001	mg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2009/12/10	0.00005	mg/L	No
Trifluralin	2009/12/10	0.0005	mg/L	No
Vinyl Chloride	2009/12/10	0.00025	mg/L	No

RIVERSIDE WELL

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2009/12/21	0.00041	mg/L	No
Aldicarb	2009/12/21	0.00049	mg/L	No
Aldrin + Dieldrin	2009/12/21	0.000004	mg/L	No
Atrazine + N-dealkylated metabolites	2009/12/21	0.0009	mg/L	No
Azinphos-methyl	2009/12/21	0.00031	mg/L	No
Bendiocarb	2009/12/21	0.00099	mg/L	No
Benzene	2009/12/21	0.00025	mg/L	No
Benzo(a)pyrene	2009/12/21	0.0000051	mg/L	No
Bromoxynil	2009/12/21	0.0005	mg/L	No
Carbaryl	2009/12/21	0.00099	mg/L	No
Carbofuran	2009/12/21	0.00099	mg/L	No
Carbon Tetrachloride	2009/12/21	0.00025	mg/L	No
Chlordane (Total)	2009/12/21	0.000004	mg/L	No
Chlorpyrifos	2009/12/21	0.00031	mg/L	No
Cyanazine	2009/12/21	0.00031	mg/L	No
Diazinon	2009/12/21	0.00031	mg/L	No

Dicamba	2009/12/21	0.0002	mg/L	No
1,2-Dichlorobenzene	2009/12/21	0.00025	mg/L	No
1,4-Dichlorobenzene	2009/12/21	0.00025	mg/L	No
(DDT) + metabolites	2009/12/21	0.000005	mg/L	No
1,2-Dichloroethane	2009/12/21	0.00025	mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	2009/12/21	0.00025	mg/L	No
Dichloromethane	2009/12/21	0.00025	mg/L	No
2-4 Dichlorophenol	2009/12/21	0.000061	mg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2009/12/21	0.0002	mg/L	No
Diclofop-methyl	2009/12/21	0.0002	mg/L	No
Dimethoate	2009/12/21	0.00031	mg/L	No
Dinoseb	2009/12/21	0.00005	mg/L	No
Diquat	2009/12/21	0.007	mg/L	No
Diuron	2009/12/21	0.0049	mg/L	No
Glyphosate	2009/12/21	0.02	mg/L	No
Heptachlor + Heptachlor Epoxide	2009/12/21	0.000004	mg/L	No
Linadane (Total)	2009/12/21	0.00000046	mg/L	No
Malathion	2009/12/21	0.00031	mg/L	No
Methoxychlor	2009/12/21	0.0000012	mg/L	No
Metolachlor	2009/12/21	0.00021	mg/L	No
Metribuzin	2009/12/21	0.00021	mg/L	No
Monochlorobenzene	2009/12/21	0.00025	mg/L	No
Paraquat	2009/12/21	0.001	mg/L	No
Parathion	2009/12/21	0.00021	mg/L	No
Pentachlorophenol	2009/12/21	0.000061	mg/L	No
Phorate	2009/12/21	0.00031	mg/L	No
Picloram	2009/12/21	0.00005	mg/L	No
Polychlorinated Biphenyls(PCB)	2009/12/21	0.0000038	mg/L	No
Prometryne	2009/12/21	0.00021	mg/L	No
Simazine	2009/12/21	0.00031	mg/L	No
Temephos	2009/12/21	0.014	mg/L	No
Terbufos	2009/12/21	0.00021	mg/L	No
Tetrachloroethylene	2009/12/21	0.00025	mg/L	No
2,3,4,6-Tetrachlorophenol	2009/12/21	0.000061	mg/L	No
Triallate	2009/12/21	0.00021	mg/L	No
Trichloroethylene	2009/12/21	0.00025	mg/L	No
2,4,6-Trichlorophenol	2009/12/21	0.000061	mg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2009/12/21	0.00005	mg/L	No
Trifluralin	2009/12/21	0.00021	mg/L	No
Vinyl Chloride	2009/12/21	0.00025	mg/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

(Only if DWS category is large municipal residential, small municipal residential, large municipal non-residential, non municipal year round residential, large non municipal non residential)