

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 2008-01-01 To 2008-12-31

<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 (20-30%) 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

Inspection & rehabilitation of Riverside & Lionel wells - \$100,000

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
2008/03/02	UV	0	mj/cm ²	Resample/Re-test;	2008/03/04
2008/04/15	Micro sample not picked up				2008/04/23
2008/06/09	Chlorine Residual	0.13	mg/L	Disinfectant restored/increased;	2008/06/09
2008/08/20	TC	2		Resample/Re-test;	2008/08/22
2008/10/20	Antimony	0.0077	mg/L	Resample/Re-test	2008/11/19

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: RIVERSIDE WELL#1					
	47	0 to 0	0 to 12		
Raw: LIONEL WELL#2					
	53	0 to 0	0 to 0		
Treated: LIONEL WELL					
	51	0 to 0	0 to 0	51	0 to 20
Treated: RIVERSIDE WELL					
	45	0 to 0	0 to 0	45	0 to 10
Distribution					
	158	0 to 0	0 to 2	42	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	0.36 - 1.88 mg/L

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

LIONEL WELL

Turbidity	8,760	0.00 - 1.97	NTU
Chlorine	8,760	0.09 - 2.00	mg/L
Fluoride (If the DWS provides fluoridation)	8,760	0.20 - 0.97	mg/L

RIVERSIDE WELL

Turbidity	8,760	0.00 - 1.06	NTU
Chlorine	8,760	0.50 - 3.55	mg/L
Fluoride (If the DWS provides fluoridation)	8,760	0.20 - 0.97	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	2008/12/22	0.001	mg/L	No

LIONEL WELL

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2008/12/23	0.0005	mg/L	No
Arsenic	2008/12/23	0.001	mg/L	No
Barium	2008/12/23	0.0173	mg/L	No
Boron	2008/12/23	0.016	mg/L	No
Cadmium	2008/12/23	0.0001	mg/L	No
Chromium	2008/12/23	0.0018	mg/L	No
Mercury	2008/12/23	0.00054	mg/L	No
Selenium	2008/12/23	0.001	mg/L	No
Uranium	2008/12/23	0.001	mg/L	No
Fluoride	2004/01/19	0.56	mg/L	No
Nitrate	2008/01/15	0.38	mg/L	No
	2008/03/26	0.34	mg/L	No
	2008/06/05	0.38	mg/L	No
	2008/08/12	0.51	mg/L	No
	2008/12/23	0.45	mg/L	No
Nitrite	2008/01/15	0.05	mg/L	No
	2008/03/26	0.05	mg/L	No
	2008/06/05	0.05	mg/L	No
	2008/08/12	0.05	mg/L	No
	2008/12/23	0.05	mg/L	No
Sodium	2006/08/22	28.10	mg/L	Yes

RIVERSIDE WELL

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2008/12/30	0.0005	mg/L	No
Arsenic	2008/12/30	0.001	mg/L	No
Barium	2008/12/30	0.0074	mg/L	No
Boron	2008/12/30	0.0079	mg/L	No
Cadmium	2008/12/30	0.0001	mg/L	No
Chromium	2008/12/30	0.001	mg/L	No
Mercury	2008/12/30	0.0001	mg/L	No
Selenium	2008/12/30	0.001	mg/L	No
Uranium	2008/12/30	0.001	mg/L	No
Fluoride	2004/01/19	0.64	mg/L	No
Nitrate	2008/01/15	0.10	mg/L	No
	2008/03/26	0.33	mg/L	No
	2008/06/05	0.41	mg/L	No
	2008/08/12	0.49	mg/L	No
	2008/10/30	0.54	mg/L	No
	2008/12/30	0.15	mg/L	No
Nitrite	2008/01/15	0.05	mg/L	No
	2008/03/26	0.05	mg/L	No
	2008/06/05	0.05	mg/L	No
	2008/08/12	0.05	mg/L	No
	2008/10/30	0.05	mg/L	No
	2008/12/30	0.05	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	39	0.001 - 0.0028 mg/L	0
Distribution	8	0.001 - 0.001 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)	2008	0.0065	mg/L	No

LIONEL WELL

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2008/12/23	0.0004	mg/L	No
Aldicarb	2008/12/23	0.00074	mg/L	No

Aldrin + Dieldrin	2008/12/23	0.000004	mg/L	No
Atrazine + N-dealkylated metabolites	2008/12/23	0.0009	mg/L	No
Azinphos-methyl	2008/12/23	0.0003	mg/L	No
Bendiocarb	2008/12/23	0.0015	mg/L	No
Benzene	2008/12/23	0.00025	mg/L	No
Benzo(a)pyrene	2008/12/23	0.00001	mg/L	No
Bromoxynil	2008/12/23	0.00051	mg/L	No
Carbaryl	2008/12/23	0.0015	mg/L	No
Carbofuran	2008/12/23	0.0015	mg/L	No
Carbon Tetrachloride	2008/12/23	0.00025	mg/L	No
Chlordane (Total)	2008/12/23	0.000004	mg/L	No
Chlorpyrifos	2008/12/23	0.0003	mg/L	No
Cyanazine	2008/12/23	0.0003	mg/L	No
Diazinon	2008/12/23	0.0003	mg/L	No
Dicamba	2008/12/23	0.0002	mg/L	No
1,2-Dichlorobenzene	2008/12/23	0.00025	mg/L	No
1,4-Dichlorobenzene	2008/12/23	0.00025	mg/L	No
(DDT) + metabolites	2008/12/23	0.000005	mg/L	No
1,2-Dichloroethane	2008/12/23	0.00025	mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	2008/12/23	0.00025	mg/L	No
Dichloromethane	2008/12/23	0.00025	mg/L	No
2-4 Dichlorophenol	2008/12/23	0.000056	mg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2008/12/23	0.0002	mg/L	No
Diclofop-methyl	2008/12/23	0.0002	mg/L	No
Dimethoate	2008/12/23	0.0003	mg/L	No
Dinoseb	2008/12/23	0.000051	mg/L	No
Diquat	2008/12/23	0.007	mg/L	No
Diuron	2008/12/23	0.0074	mg/L	No
Glyphosate	2008/12/23	0.02	mg/L	No
Heptachlor + Heptachlor Epoxide	2008/12/23	0.000004	mg/L	No
Linadane (Total)	2008/12/23	0.00000047	mg/L	No
Malathion	2008/12/23	0.0003	mg/L	No
Methoxychlor	2008/12/23	0.0000013	mg/L	No
Metolachlor	2008/12/23	0.0002	mg/L	No
Metribuzin	2008/12/23	0.0002	mg/L	No
Monochlorobenzene	2008/12/23	0.00025	mg/L	No
Paraquat	2008/12/23	0.001	mg/L	No
Parathion	2008/12/23	0.0002	mg/L	No
Pentachlorophenol	2008/12/23	0.000056	mg/L	No
Phorate	2008/12/23	0.0003	mg/L	No
Picloram	2008/12/23	0.000051	mg/L	No
Polychlorinated Biphenyls(PCB)	2008/12/23	0.0000039	mg/L	No
Prometryne	2008/12/23	0.0002	mg/L	No
Simazine	2008/12/23	0.0003	mg/L	No
Temephos	2008/12/23	0.021	mg/L	No
Terbufos	2008/12/23	0.0002	mg/L	No
Tetrachloroethylene	2008/12/23	0.00025	mg/L	No
2,3,4,6-Tetrachlorophenol	2008/12/23	0.000056	mg/L	No
Triallate	2008/12/23	0.0002	mg/L	No
Trichloroethylene	2008/12/23	0.00025	mg/L	No
2,4,6-Trichlorophenol	2008/12/23	0.000056	mg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2008/12/23	0.000051	mg/L	No

Trifluralin	2008/12/23	0.0002	mg/L	No
Vinyl Chloride	2008/12/23	0.00025	mg/L	No

RIVERSIDE WELL

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2008/12/30	0.0004	mg/L	No
Aldicarb	2008/12/30	0.0005	mg/L	No
Aldrin + Dieldrin	2008/12/30	0.000004	mg/L	No
Atrazine + N-dealkylated metabolites	2008/12/30	0.0009	mg/L	No
Azinphos-methyl	2008/12/30	0.0003	mg/L	No
Bendiocarb	2008/12/30	0.001	mg/L	No
Benzene	2008/12/30	0.00025	mg/L	No
Benzo(a)pyrene	2008/12/30	0.00001	mg/L	No
Bromoxynil	2008/12/30	0.00052	mg/L	No
Carbaryl	2008/12/30	0.001	mg/L	No
Carbofuran	2008/12/30	0.001	mg/L	No
Carbon Tetrachloride	2008/12/30	0.00025	mg/L	No
Chlordane (Total)	2008/12/30	0.000004	mg/L	No
Chlorpyrifos	2008/12/30	0.0003	mg/L	No
Cyanazine	2008/12/30	0.0003	mg/L	No
Diazinon	2008/12/30	0.0003	mg/L	No
Dicamba	2008/12/30	0.00021	mg/L	No
1,2-Dichlorobenzene	2008/12/30	0.00025	mg/L	No
1,4-Dichlorobenzene	2008/12/30	0.00025	mg/L	No
(DDT) + metabolites	2008/12/30	0.000005	mg/L	No
1,2-Dichloroethane	2008/12/30	0.00025	mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	2008/12/30	0.00025	mg/L	No
Dichloromethane	2008/12/30	0.00025	mg/L	No
2-4 Dichlorophenol	2008/12/30	0.000055	mg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2008/12/30	0.00021	mg/L	No
Diclofop-methyl	2008/12/30	0.00021	mg/L	No
Dimethoate	2008/12/30	0.0003	mg/L	No
Dinoseb	2008/12/30	0.000052	mg/L	No
Diquat	2008/12/30	0.007	mg/L	No
Diuron	2008/12/30	0.005	mg/L	No
Glyphosate	2008/12/30	0.02	mg/L	No
Heptachlor + Heptachlor Epoxide	2008/12/30	0.000004	mg/L	No
Linadane (Total)	2008/12/30	0.00000034	mg/L	No
Malathion	2008/12/30	0.0003	mg/L	No
Methoxychlor	2008/12/30	0.0000009	mg/L	No
Metolachlor	2008/12/30	0.0002	mg/L	No
Metribuzin	2008/12/30	0.0002	mg/L	No
Monochlorobenzene	2008/12/30	0.00025	mg/L	No
Paraquat	2008/12/30	0.001	mg/L	No
Parathion	2008/12/30	0.0002	mg/L	No
Pentachlorophenol	2008/12/30	0.000055	mg/L	No
Phorate	2008/12/30	0.0003	mg/L	No
Picloram	2008/12/30	0.000052	mg/L	No
Polychlorinated Biphenyls(PCB)	2008/12/30	0.0000028	mg/L	No
Prometryne	2008/12/30	0.0002	mg/L	No

Simazine	2008/12/30	0.0003	mg/L	No
Temephos	2008/12/30	0.014	mg/L	No
Terbufos	2008/12/30	0.0002	mg/L	No
Tetrachloroethylene	2008/12/30	0.00025	mg/L	No
2,3,4,6-Tetrachlorophenol	2008/12/30	0.000055	mg/L	No
Triallate	2008/12/30	0.0002	mg/L	No
Trichloroethylene	2008/12/30	0.00025	mg/L	No
2,4,6-Trichlorophenol	2008/12/30	0.000055	mg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2008/12/30	0.000052	mg/L	No
Trifluralin	2008/12/30	0.0002	mg/L	No
Vinyl Chloride	2008/12/30	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)