

Part III Form 2

Section 11. ANNUAL REPORT.

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|--|---|
| Drinking-Water System Number: | 210001111 |
| Drinking-Water System | Wanapitei Water Treatment Plant 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 checked="" type="checkbox"/> No <input 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 |
|--------------------------------------|------------------------------|
| Markstay-Warren | 220013606 |
| Garson Wells and Distribution System | 220003485 |
| David Street Water Treatment Plant | 220003537 |

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 City of Greater Sudbury includes the urban area of Sudbury and the surrounding outlying areas with the Wanapitei Treatment Water Treatment Plant servicing the northeastern and northwestern urban areas including Markstay, Coniston and parts of Garson (west of Falconbridge Road at O'Neil Drive) as well as supplying water to the Ellis Reservoir. The raw water is pumped from the Wanapitei River via the Wanapitei Intake which is situated just north of Hwy. 17 in the community of Wahnapiatae on the banks of the Wanapitei River. The Raw water is drawn from a concrete intake structure that protrudes approximately 18 metres into the Wanapitei River. The raw water passes through a coarse aluminum bar screen before it enters the Raw Water Intake Pumping Station then through two finer stainless steel screens inside the station before being pumped to the treatment plant approximately 2 km to the west. The Wanapitei Water Treatment utilizes a conventional water treatment process complete with Coagulation / Flocculation,

List all water treatment chemicals used over this reporting period

Chlorine Gas, Polyphosphate, Sodium Chlorite (20%), PHAS-Aluminum Sulfate, Polymer, Hydrated Lime, Fluoride (Hydrofluosilicic acid 20-30%), Chlorine Dioxide

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

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 |
|---------------|---|--------|-----------------|----------------------------------|------------------------|
| 2008/02/02 | Pre - Chlorine Dioxide Line broke shut down plant | | | Resample/Re-test; | 2008/02/02 |
| 2008/11/24 | Turbidity | +1ntu | NTU | Disinfectant restored/increased; | 2008/11/24 |

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: WANAPITEI RIVER | | | | | |
| | 106 | 0 to 23 | 0 to 215 | | |
| Treated: HL PUMP STATION, Sudbury (Wanapitei) WTP | | | | | |
| | 150 | 0 to 0 | 0 to 0 | 145 | 0 to 1500 |
| Distribution | | | | | |
| | 1,616 | 0 to 0 | 0 to 0 | 382 | 0 to 1000 |

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 | 0.23 - 3.84 mg/L |

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

HL PUMP STATION, Sudbury (Wanapitei) WTP

| | | |
|--|-------|------------------|
| Turbidity | 8,760 | 0.00 - 1.53 NTU |
| Chlorine | 8,760 | 0.89 - 2.42 mg/L |
| Fluoride (If the DWS provides fluoridation) | 363 | 0.02 - 1.98 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

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

| Parameter | Sample Date | Result Value | Unit of Measure | Exceedance |
|-----------|-------------|--------------|-----------------|------------|
| Lead | 2008/12/23 | 0.001 | mg/L | No |

HL PUMP STATION, Sudbury (Wanapitei) WTP

| Parameter | Sample Date | Result Value | Unit of Measure | Exceedance |
|-----------|-------------|--------------|-----------------|------------|
| Antimony | 2008/12/19 | 0.0005 | mg/L | No |
| Arsenic | 2008/12/19 | 0.001 | mg/L | No |
| Barium | 2008/12/19 | 0.0135 | mg/L | No |
| Boron | 2008/12/19 | 0.005 | mg/L | No |
| Cadmium | 2008/12/19 | 0.0001 | mg/L | No |
| Chromium | 2008/12/19 | 0.001 | mg/L | No |
| Mercury | 2008/12/19 | 0.0001 | mg/L | No |
| Selenium | 2008/12/19 | 0.001 | mg/L | No |
| Uranium | 2008/12/19 | 0.001 | mg/L | No |
| Fluoride | 2004/01/19 | 0.58 | mg/L | No |
| Nitrate | 2008/01/17 | 0.13 | mg/L | No |
| | 2008/02/13 | 0.14 | mg/L | No |
| | 2008/03/03 | 0.17 | mg/L | No |
| | 2008/03/25 | 0.15 | mg/L | No |
| | 2008/06/02 | 0.14 | mg/L | No |
| | 2008/08/11 | 0.10 | mg/L | No |
| | 2008/10/20 | 0.10 | mg/L | No |
| | 2008/12/19 | 0.13 | mg/L | No |
| Nitrite | 2008/01/17 | 0.05 | mg/L | No |
| | 2008/02/13 | 0.03 | mg/L | No |
| | 2008/03/03 | 0.03 | mg/L | No |
| | 2008/03/25 | 0.05 | mg/L | No |
| | 2008/06/02 | 0.05 | mg/L | No |
| | 2008/08/11 | 0.05 | mg/L | No |
| | 2008/10/20 | 0.05 | mg/L | No |
| | 2008/12/19 | 0.05 | mg/L | No |
| Sodium | 2005/12/14 | 1.60 | 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 | 176 | 0.001 - 0.0018 mg/L | 0 |
| Distribution | 33 | 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 | 0.0505 | mg/L | No |

HL PUMP STATION, Sudbury (Wanapitei) WTP

| Parameter | Sample Date | Result Value | Unit of Measure | Exceedance |
|--|-------------|--------------|-----------------|------------|
| Alachlor | 2008/12/19 | 0.0004 | mg/L | No |
| Aldicarb | 2008/12/19 | 0.00074 | mg/L | No |
| Aldrin + Dieldrin | 2008/12/19 | 0.000004 | mg/L | No |
| Atrazine + N-dealkylated metabolites | 2008/12/19 | 0.0009 | mg/L | No |
| Azinphos-methyl | 2008/12/19 | 0.0003 | mg/L | No |
| Bendiocarb | 2008/12/19 | 0.0015 | mg/L | No |
| Benzene | 2008/12/19 | 0.00025 | mg/L | No |
| Benzo(a)pyrene | 2008/12/19 | 0.00001 | mg/L | No |
| Bromoxynil | 2008/12/19 | 0.0005 | mg/L | No |
| Carbaryl | 2008/12/19 | 0.0015 | mg/L | No |
| Carbofuran | 2008/12/19 | 0.0015 | mg/L | No |
| Carbon Tetrachloride | 2008/12/19 | 0.00025 | mg/L | No |
| Chlordane (Total) | 2008/12/19 | 0.000004 | mg/L | No |
| Chlorpyrifos | 2008/12/19 | 0.0003 | mg/L | No |
| Cyanazine | 2008/12/19 | 0.0003 | mg/L | No |
| Diazinon | 2008/12/19 | 0.0003 | mg/L | No |
| Dicamba | 2008/12/19 | 0.0002 | mg/L | No |
| 1,2-Dichlorobenzene | 2008/12/19 | 0.00025 | mg/L | No |
| 1,4-Dichlorobenzene | 2008/12/19 | 0.00025 | mg/L | No |
| (DDT) + metabolites | 2008/12/19 | 0.000005 | mg/L | No |
| 1,2-Dichloroethane | 2008/12/19 | 0.00025 | mg/L | No |
| 1,1-Dichloroethylene (vinylidene chloride) | 2008/12/19 | 0.00025 | mg/L | No |
| Dichloromethane | 2008/12/19 | 0.00025 | mg/L | No |
| 2-4 Dichlorophenol | 2008/12/19 | 0.000056 | mg/L | No |
| 2,4-Dichlorophenoxy acetic acid (2,4-D) | 2008/12/19 | 0.0002 | mg/L | No |
| Diclofop-methyl | 2008/12/19 | 0.0002 | mg/L | No |
| Dimethoate | 2008/12/19 | 0.0003 | mg/L | No |
| Dinoseb | 2008/12/19 | 0.00005 | mg/L | No |
| Diquat | 2008/12/19 | 0.007 | mg/L | No |
| Diuron | 2008/12/19 | 0.0074 | mg/L | No |
| Glyphosate | 2008/12/19 | 0.02 | mg/L | No |
| Heptachlor + Heptachlor Epoxide | 2008/12/19 | 0.000004 | mg/L | No |
| Linadane (Total) | 2008/12/19 | 0.00000053 | mg/L | No |
| Malathion | 2008/12/19 | 0.0003 | mg/L | No |
| Methoxychlor | 2008/12/19 | 0.0000014 | mg/L | No |
| Metolachlor | 2008/12/19 | 0.0002 | mg/L | No |
| Metribuzin | 2008/12/19 | 0.0002 | mg/L | No |
| Monochlorobenzene | 2008/12/19 | 0.00025 | mg/L | No |
| Paraquat | 2008/12/19 | 0.001 | mg/L | No |
| Parathion | 2008/12/19 | 0.0002 | mg/L | No |
| Pentachlorophenol | 2008/12/19 | 0.000056 | mg/L | No |
| Phorate | 2008/12/19 | 0.0003 | mg/L | No |
| Picloram | 2008/12/19 | 0.00005 | mg/L | No |
| Polychlorinated Biphenyls(PCB) | 2008/12/19 | 0.0000044 | mg/L | No |
| Prometryne | 2008/12/19 | 0.0002 | mg/L | No |
| Simazine | 2008/12/19 | 0.0003 | mg/L | No |
| Temephos | 2008/12/19 | 0.021 | mg/L | No |
| Terbufos | 2008/12/19 | 0.0002 | mg/L | No |
| Tetrachloroethylene | 2008/12/19 | 0.00025 | mg/L | No |

| | | | | |
|--|------------|----------|------|----|
| 2,3,4,6-Tetrachlorophenol | 2008/12/19 | 0.000056 | mg/L | No |
| Triallate | 2008/12/19 | 0.0002 | mg/L | No |
| Trichloroethylene | 2008/12/19 | 0.00025 | mg/L | No |
| 2,4,6-Trichlorophenol | 2008/12/19 | 0.000056 | mg/L | No |
| 2,4,5-Trichlorophenoxy acetic acid (2,4,5-T) | 2008/12/19 | 0.00005 | mg/L | No |
| Trifluralin | 2008/12/19 | 0.0002 | mg/L | No |
| Vinyl Chloride | 2008/12/19 | 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)