

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

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| Drinking-Water System Number: | #220007034 |
| Drinking-Water System Name: | Tobermory Primary Place Day Care |
| Drinking-Water System Owner: | Municipality of Northern Bruce Peninsula |
| Drinking-Water System Category: | Small Municipal Non-Residential |
| Period being reported: | January 1, 2011 – December 31, 2011 |

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [] No [X]

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.

Municipality of Northern Bruce Peninsula
56 Lindsay Road 5
Lion's Head, Ontario
N0H 1W0

Complete for all other Categories.

Number of Designated Facilities served:

1

Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [X] No []

Number of Interested Authorities you report to:

1

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [X] 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 | |

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

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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
- Public access/notice via other method Include notice in water billings

Describe your Drinking-Water System

One drilled well
 Raw water passes through a softener, followed by treatment consisting of one (1) 5 micron cartridge filter, one (1) 1 micron cartridge filter, one (1) UV disinfection unit and chlorine disinfection.

List all water treatment chemicals used over this reporting period

Sodium hypochlorite
 Water softening salt

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

Low Flow Cell for online chlorine analyzer

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 |
|----------------------------|------------------------|--------|-----------------|--|--|
| AWQI 100678 2011/04/28 | Turbidity | > 1.0 | NTU | Replace Filters, Clean Chlorine injection point, microbiological sampling and precautionary boil water advisory issued by operating authority. | Precautionary Boil Water Advisory lifted 2011/05/09 |
| AWQI 1006799 2011/04/29 | Turbidity | > 1.0 | NTU | | |
| AWQI 100708 2011/04/30 | Turbidity | > 1.0 | NTU | | |
| AWQI 100715 2011/05/01 | Turbidity | > 1.0 | NTU | | |
| AWQI 100718 2011/05/02 | Free Chlorine Residual | < 0.05 | Mg/L | | |

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|---------------------------|------------------------|--------|------|---|--|
| AWQI 100893 2011/05/17 | Turbidity | > 1.0 | NTU | Replaced filter, flushed, collected microbiological samples and Operating Authority issued precautionary boil water advisory. | Precautionary Boil Water Advisory lifted 2011/05/25 |
| AWQI 102066 2011/07/18 | Free Chlorine Residual | < 0.05 | Mg/L | Chlorine analyzer not functioning. Flushed plumbing and increased free Cl ₂ residual from 0.47 mg/L to 0.69 mg/L, restored analyzer functionality. | 2011/07/18 |
| AWQI 103624 2011/09/30 | Turbidity | > 1.0 | NTU | Replaced filters, flushed, and Operating Authority issued precautionary boil water advisory. | Precautionary Boil Water Advisory lifted 2011/10/03 |
| AWQI 103920 2011/10/20 | Turbidity | > 1.0 | NTU | Replaced filter, flushed, monitoring PLC not functioning, operators monitored alarms, monitored turbidity levels three times per week and on every Daycare operating day. | PLC was replaced 2011/11/15 |

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 | 17 | 0 - 11 | 1 - 265 | N/A | N/A |
| Treated | N/A | N/A | N/A | N/A | N/A |
| Distribution | 31 | 0 - 0 | 0 - 0 | N/A | N/A |

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 – Treated Water | 8760 | 0.013 – 3.38 NTU |
| Free Chlorine | 8760 | 0.05 – 2.92 |
| Dist. Free Chlorine | 160 | 0.17 – 2.90 |

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

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, 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 | Sample Date | Result Value | Unit of Measure | Exceedance |
|-----------------|-------------|--------------|-----------------|------------|
| Antimony | 09/22/10 | 0.08 | ug/L | No |
| Arsenic | 09/22/10 | 0.07 | ug/L | No |
| Barium | 09/22/10 | 20.5 | ug/L | No |
| Boron | 09/22/10 | 21.0 | ug/L | No |
| Cadmium | 09/22/10 | 0.035 | ug/L | No |
| Chromium | 09/22/10 | 2.7 | ug/L | No |
| Lead (standing) | 06/26/11 | 4.45 | ug/L | No |
| Mercury | 09/22/10 | <0.02 | ug/L | No |
| Selenium | 09/22/10 | 8.0 | ug/L | No |
| Sodium | 05/19/10 | 103 | mg/L | Yes |
| Uranium | 09/22/10 | 0.030 | ug/L | No |
| Fluoride | 05/19/10 | 0.14 | mg/L | No |
| Nitrite | 01/19/11 | <0.005 | mg/L | No |
| Nitrite | 04/11/11 | <0.005 | mg/L | No |
| Nitrite | 07/11/11 | <0.005 | mg/L | No |
| Nitrite | 09/03/11 | <0.005 | mg/L | No |
| Nitrate | 01/19/11 | 3.82 | mg/L | No |
| Nitrate | 04/11/11 | 0.412 | mg/L | No |
| Nitrate | 07/11/11 | 4.04 | mg/L | No |
| Nitrate | 09/03/11 | 6.73 | mg/L | No |

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

| Parameter | Sample Date | Result Value | Exceedance |
|--|-------------|--------------|------------|
| Alachlor (ug/L) - TW | 09/22/10 | < 0.11 | No |
| Aldicarb (ug/L) - TW | 09/22/10 | < 0.30 | No |
| Aldrin + Dieldrin (ug/L) - TW | 09/22/10 | < 0.067 | No |
| Atrazine + N-dealkylated metabolites (ug/L) - TW | 09/22/10 | < 0.12 | No |
| Azinphos-methyl (ug/L) - TW | 09/22/10 | < 0.21 | No |
| Bendiocarb (ug/L) - TW | 09/22/10 | < 0.13 | No |
| Benzene (ug/L) - TW | 09/22/10 | < 0.32 | No |
| Benzo(a)pyrene (ug/L) - TW | 09/22/10 | < 0.0040 | No |
| Bromoxynil (ug/L) - TW | 09/22/10 | < 0.33 | No |
| Carbaryl (ug/L) - TW | 09/22/10 | < 0.16 | No |
| Carbofuran (ug/L) - TW | 09/22/10 | < 0.37 | No |
| Carbon Tetrachloride (ug/L) - TW | 09/22/10 | < 0.16 | No |
| Chlordane:Total (ug/L) - TW | 09/22/10 | < 0.11 | No |
| Chlorpyrifos (ug/L) - TW | 09/22/10 | < 0.18 | No |
| Cyanazine (ug/L) - TW | 09/22/10 | < 0.18 | No |
| Diazinon (ug/L) - TW | 09/22/10 | < 0.081 | No |
| Dicamba (ug/L) - TW | 09/22/10 | < 0.20 | No |
| 1,2-Dichlorobenzene (ug/L) - TW | 09/22/10 | < 0.41 | No |
| 1,4-Dichlorobenzene (ug/L) - TW | 09/22/10 | < 0.36 | No |
| Dichlorodiphenyltrichloroethane(DDT) + metabolites (ug/L) - TW | 09/22/10 | < 0.14 | No |
| 1,2-Dichloroethane (ug/L) - TW | 09/22/10 | < 0.35 | No |
| 1,1-Dichloroethylene (ug/L) - TW | 09/22/10 | < 0.33 | No |
| Dichloromethane (ug/L) - TW | 09/22/10 | < 0.35 | No |
| 2,4-Dichlorophenol (ug/L) - TW | 09/22/10 | < 0.15 | No |
| 2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW | 09/22/10 | < 0.19 | No |
| Diclofop-methyl (ug/L) - TW | 09/22/10 | < 0.40 | No |
| Dimethoate (ug/L) - TW | 09/22/10 | < 0.12 | No |
| Dinoseb (ug/L) - TW | 09/22/10 | < 0.36 | No |
| Diquat (ug/L) - TW | 09/22/10 | < 1.00 | No |
| Diuron (ug/L) - TW | 09/22/10 | < 0.087 | No |

| | | | |
|--|----------|---------|----|
| Glyphosate (ug/L) - TW | 09/22/10 | < 6.00 | No |
| Heptachlor+Hepachlor Epoxide (ug/L) - TW | 09/22/10 | < 0.11 | No |
| Lindane: (ug/L) - TW | 09/22/10 | < 0.056 | No |
| Malathion (ug/L) - TW | 09/22/10 | < 0.091 | No |
| Methoxychlor (ug/L) - TW | 09/22/10 | < 0.14 | No |
| Metolachlor (ug/L) - TW | 09/22/10 | < 0.092 | No |
| Metribuzin (ug/L) - TW | 09/22/10 | < 0.12 | No |
| Monochlorobenzene (ug/L) - TW | 09/22/10 | < 0.30 | No |
| Paraquat (ug/L) - TW | 09/22/10 | < 1.00 | No |
| Parathion (ug/L) - TW | 09/22/10 | < 0.18 | No |
| Pentachlorophenol (ug/L) - TW | 09/22/10 | < 0.15 | No |
| Phorate (ug/L) - TW | 09/22/10 | < 0.11 | No |
| Picloram (ug/L) - TW | 09/22/10 | < 0.25 | No |
| Polychlorinated Bichenysl(PCB) (ug/L) - TW | 09/22/10 | < 0.040 | No |
| Prometryne (ug/L) - TW | 09/22/10 | < 0.23 | No |
| Simazine (ug/L) - TW | 09/22/10 | < 0.15 | No |
| THM (ug/L) – DW (Average) | 2011 | 8.65 | No |
| Temephos (ug/L) - TW | 09/22/10 | < 0.31 | No |
| Terbufos (ug/L) - TW | 09/22/10 | < 0.12 | No |
| Tetrachloroethylene (ug/L) - TW | 09/22/10 | < 0.35 | No |
| 2,3,4,6-Tetrachlorophenol (ug/L) - TW | 09/22/10 | < 0.14 | No |
| Triallate (ug/L) - TW | 09/22/10 | < 0.10 | No |
| Trichloroethylene (ug/L) - TW | 09/22/10 | < 0.43 | No |
| 2,4,6-Trichlorophenol (ug/L) - TW | 09/22/10 | < 0.25 | No |
| 2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW | 09/22/10 | < 0.22 | No |
| Trifluralin (ug/L) - TW | 09/22/10 | < 0.12 | No |
| Vinyl Chloride (ug/L) - TW | 09/22/10 | < 0.17 | 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 |
|------------------|---------------------|------------------------|-----------------------|
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(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)