



**OPTIONAL ANNUAL REPORT TEMPLATE**

<b>Drinking-Water System Number:</b>	220001423
<b>Drinking-Water System Name:</b>	KENORA AREA WATER TREATMENT PLANT
<b>Drinking-Water System Owner:</b>	CITY OF KENORA
<b>Drinking-Water System Category:</b>	LARGE MUNICIPAL RESIDENTIAL
<b>Period being reported:</b>	JANUARY 1, 2011 – DECEMBER 31, 2011

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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>City Hall – 1 Main Street South              Kenora Water Treatment Plant – 9 7th Street South              City of Kenora – Website  <a href="http://www.kenora.ca">http://www.kenora.ca</a></p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served: <input type="text" value="N/A"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ]</p> <p>Number of Interested Authorities you report to: <input type="text" value="N/A"/></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 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
Rocky Heights Distribution System	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 [  ]



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 \_\_\_\_\_

**Describe your Drinking-Water System**

The Kenora Water Treatment Plant is categorized as Large Municipal Residential. It is designated a Class III plant. The total number of service connections at this time is 4979. The water plant has a rated capacity of 292 Litres per second. The process is chemically assisted and includes filtration to meet the treatment requirements of O.Reg 170/03 for surface water. The plant uses chloramination to provide secondary disinfection prior to distribution.

**List all water treatment chemicals used over this reporting period**

Chlorine, Ammonium Sulphate, Aluminum Sulphate, Polyelectrolyte, Sodium Hydroxide, Sodium Silicofluoride.

**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**

Keewatin Standpipe Repainting – \$301,475.68  
Water Main Replacement in Lakeside - \$32,000



**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**

<b>Incident Date</b>	<b>Parameter</b>	<b>Result</b>	<b>Unit of Measure</b>	<b>Corrective Action</b>	<b>Corrective Action Date</b>
<b>Apr 17 2011</b>	<b>Pressure Loss</b>	<b>N/A</b>	<b>N/A</b>	<b>Pressure restored. BWA put in place. Two consecutive sets of bacteriological samples were taken 24 hours apart and were clear of harmful bacteria.</b>	<b>Apr 29 2011</b>
<b>Apr 18 2011 Apr 24 2011 Apr 26 2011 July 6 2011</b>	<b>Low Chlorine</b>	<b>0.08C 0.03C 0.05C 0.00C</b>	<b>mg/L</b>	<b>BWA posted. Issue was discussed and determined that the problem is due to a large service line and minimal water use on the property. The cities responsibility to deliver water with an adequate chlorine residual to the property line has been met and is confirmed regularly. Location currently remains on a BWA.</b>	<b>N/A</b>
<b>Aug 9 2011</b>	<b>Pressure Loss</b>	<b>N/A</b>	<b>N/A</b>	<b>Loss of pressure for 4 minutes recorded in area of distribution system during standpipe maintenance. Tested chlorine residuals at points as instructed by NWHU. Residuals were 1.13 and 1.15 which was determined to be sufficient.</b>	<b>Aug 10 2011</b>

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 Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	52	<1 – 10	<1 – 300	N/A	N/A
Treated	52	Absent	Absent	52	0 – 2
Distribution	312	Absent	Absent	90	0 – 30

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	Number of Online Samples	Range of Results
Turbidity	365	0.026 - 0.071 NTU	8760	0.032 – 0.066 NTU
Chlorine	365	1.83 – 2.25 mg/L	8760	1.82 – 2.20 mg/L
Fluoride (If the DWS provides fluoridation)	365	0.02 -0.74 mg/L	8760	0.03 – 0.78 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, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
Nov 3/2004	Total suspended solids	No samples were taken as effluent was not discharged to lake in 2011.	N/A	mg/L

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	Feb 7/2011	<0.60	ug/L	No
Arsenic	Feb 7/2011	<1.00	ug/L	No
Barium	Feb 7/2011	10.0	ug/L	No
Boron	Feb 7/2011	<50.0	ug/L	No
Cadmium	Feb 7/2011	<0.10	ug/L	No
Chromium	Feb 7/2011	<1.00	ug/L	No
*Lead	N/A	N/A	N/A	N/A
Mercury	Feb 7/2011	<0.10	ug/L	No
Selenium	Feb 7/2011	<1.00	ug/L	No
Sodium	Feb 8/2010	13.4	mg/L	No
Uranium	Feb 7/2011	<2.00	ug/L	No

Fluoride	Feb 8/2010	0.582	mg/L	No
Nitrite	Feb 7/2011	<0.020	mg/L	No
	May 9/2011	<0.020	mg/L	No
	Aug 9/2011	<0.100	mg/L	No
	Nov 7/2011	<0.020	mg/L	No
Nitrate	Feb 7/2011	0.194	mg/L	No
	May 9/2011	0.061	mg/L	No
	Aug 9/2011	<0.100	mg/L	No
	Nov 7/2011	<0.030	mg/L	No

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems.

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

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	0	N/A	N/A
Distribution	0	N/A	N/A

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Feb 7/2011	<0.10	ug/L	No
Aldicarb	Feb 7/2011	<1.00	ug/L	No
Aldrin + Dieldrin	Feb 7/2011	<0.040	ug/L	No
Atrazine + N-dealkylated metabolites	Feb 7/2011	<0.20	ug/L	No
Azinphos-methyl	Feb 7/2011	<0.10	ug/L	No
Bendiocarb	Feb 7/2011	<0.20	ug/L	No
Benzene	Feb 7/2011	<0.50	ug/L	No
Benzo(a)pyrene	Feb 7/2011	<0.010	ug/L	No
Bromoxynil	Feb 7/2011	<0.20	ug/L	No
Carbaryl	Feb 7/2011	<0.20	ug/L	No
Carbofuran	Feb 7/2011	<0.20	ug/L	No
Carbon Tetrachloride	Feb 7/2011	<0.50	ug/L	No
Chlordane (Total)	Feb 7/2011	<0.30	ug/L	No
Chlorpyrifos	Feb 7/2011	<0.10	ug/L	No
Cyanazine	Feb 7/2011	<0.10	ug/L	No
Diazinon	Feb 7/2011	<0.10	ug/L	No
Dicamba	Feb 7/2011	<0.20	ug/L	No
1,2-Dichlorobenzene	Feb 7/2011	<0.50	ug/L	No



1,4-Dichlorobenzene	Feb 7/2011	<0.50	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Feb 7/2011	<0.40	ug/L	No
1,2-Dichloroethane	Feb 7/2011	<0.50	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Feb 7/2011	<0.50	ug/L	No
Dichloromethane	Feb 7/2011	<0.50	ug/L	No
2-4 Dichlorophenol	Feb 7/2011	<0.30	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Feb 7/2011	<0.20	ug/L	No
Diclofop-methyl	Feb 7/2011	<0.20	ug/L	No
Dimethoate	Feb 7/2011	<0.10	ug/L	No
Dinoseb	Feb 7/2011	<0.20	ug/L	No
Diquat	Feb 7/2011	<1.00	ug/L	No
Diuron	Feb 7/2011	<1.00	ug/L	No
Glyphosate	Feb 7/2011	<5.00	ug/L	No
Heptachlor + Heptachlor Epoxide	Feb 7/2011	<0.20	ug/L	No
Lindane (Total)	Feb 7/2011	<0.10	ug/L	No
Malathion	Feb 7/2011	<0.10	ug/L	No
Methoxychlor	Feb 7/2011	<0.10	ug/L	No
Metolachlor	Feb 7/2011	<0.10	ug/L	No
Metribuzin	Feb 7/2011	<0.10	ug/L	No
Monochlorobenzene	Feb 7/2011	<0.50	ug/L	No
Paraquat	Feb 7/2011	<1.00	ug/L	No
Parathion	Feb 7/2011	<0.10	ug/L	No
Pentachlorophenol	Feb 7/2011	<0.50	ug/L	No
Phorate	Feb 7/2011	<0.10	ug/L	No
Picloram	Feb 7/2011	<0.20	ug/L	No
Polychlorinated Biphenyls(PCB)	Feb 7/2011	<0.035	ug/L	No
Prometryne	Feb 7/2011	<0.10	ug/L	No
Simazine	Feb 7/2011	<0.10	ug/L	No
THM (NOTE: show latest annual average)	Feb 7/2011 May 9/2011 Aug 9/2011 Nov 7/2011	66.1	ug/L	No
Temephos	Feb 7/2011	<0.10	ug/L	No
Terbufos	Feb 7/2011	<0.20	ug/L	No
Tetrachloroethylene	Feb 7/2011	<0.50	ug/L	No
2,3,4,6-Tetrachlorophenol	Feb 7/2011	<0.50	ug/L	No
Triallate	Feb 7/2011	<0.10	ug/L	No
Trichloroethylene	Feb 7/2011	<0.50	ug/L	No
2,4,6-Trichlorophenol	Feb 7/2011	<0.50	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Feb 7/2011	<0.20	ug/L	No
Trifluralin	Feb 7/2011	<0.10	ug/L	No
Vinyl Chloride	Feb 7/2011	<0.50	ug/L	No



**List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.**

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
<b>Sodium</b>	<b>13.4</b>	<b>mg/L</b>	<b>Feb 8/2010</b>
<b>THM</b>	<b>66.1</b>	<b>ug/L</b>	<b>Annual Average</b>