



Annual report template

**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, 2018 – DECEMBER 31, 2018

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people? Yes [X] No [ ]</b></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]</b></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></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><b>Number of Designated Facilities served:</b></p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">N/A</div> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</b></p> <p><b>Number of Interested Authorities you report to:</b></p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">N/A</div> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]</b></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 [X] 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 5005. 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**

Replacement of air cushioned check valves at booster stations – \$15,412  
Installation of sound barrier panels for generator at Norman Booster – \$24,706  
Replacement of effluent turbidimeter and pH analyzer – \$6,650

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
Aug 7 2018	Low Distribution Chlorine Residual	0.00	mg/L	A required bleeder in the distribution system was mistakenly turned off during a construction project for a longer period of time than what was required. When tested there was no chlorine at the dead end, but the last user had an adequate residual. No residences were affected. Bleeder was turned back on and chlorine residual was quickly reestablished.	Aug 7 2018

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	0 – 7	0 – 461	N/A	N/A
Treated	52	Absent	Absent	52	0 – 4
Distribution	312	Absent	Absent	102	0 – 18

**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
<b>Turbidity</b>	<b>365</b>	<b>0.054 - 0.180 NTU</b>	<b>8760</b>	<b>0.020 – 0.089 NTU</b>
<b>Chlorine</b>	<b>365</b>	<b>0.98 – 1.82 mg/L</b>	<b>8760</b>	<b>1.01 – 1.71 mg/L</b>
<b>Fluoride (If the DWS provides fluoridation)</b>	<b>365</b>	<b>0.04 - 0.76 mg/L</b>	<b>8760</b>	<b>0.03 – 0.73 mg/L</b>

**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
<b>Nov 3/2004</b>	<b>Total suspended solids</b>	<b>No samples were taken as effluent was not discharged to lake in 2018.</b>	<b>N/A</b>	<b>mg/L</b>

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
<b>Antimony</b>	<b>Jan 8/2018</b>	<b>&lt;0.60</b>	<b>µg/L</b>	<b>No</b>
<b>Arsenic</b>	<b>Jan 8/2018</b>	<b>&lt;1.0</b>	<b>µg/L</b>	<b>No</b>
<b>Barium</b>	<b>Jan 8/2018</b>	<b>&lt;10</b>	<b>µg/L</b>	<b>No</b>
<b>Boron</b>	<b>Jan 8/2018</b>	<b>&lt;50</b>	<b>µg/L</b>	<b>No</b>
<b>Cadmium</b>	<b>Jan 8/2018</b>	<b>&lt;0.10</b>	<b>µg/L</b>	<b>No</b>
<b>Chromium</b>	<b>Jan 8/2018</b>	<b>&lt;1.0</b>	<b>µg/L</b>	<b>No</b>
<b>*Lead</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Mercury</b>	<b>Jan 8/2018</b>	<b>&lt;0.10</b>	<b>µg/L</b>	<b>No</b>
<b>Selenium</b>	<b>Jan 8/2018</b>	<b>&lt;1.0</b>	<b>µg/L</b>	<b>No</b>
<b>Sodium</b>	<b>Jan 30/2017</b>	<b>13.3</b>	<b>mg/L</b>	<b>No</b>
<b>Uranium</b>	<b>Jan 8/2018</b>	<b>&lt;2.0</b>	<b>µg/L</b>	<b>No</b>
<b>Fluoride</b>	<b>Jan 5/2015</b>	<b>0.550</b>	<b>mg/L</b>	<b>No</b>
<b>Nitrite</b>	<b>Jan 8/2018</b>	<b>&lt;0.010</b>	<b>mg/L</b>	<b>No</b>

	<b>Apr 9/2018</b>	<b>&lt;0.010</b>	<b>mg/L</b>	<b>No</b>
	<b>Jul 16/2018</b>	<b>&lt;0.010</b>	<b>mg/L</b>	<b>No</b>
	<b>Oct 15/2018</b>	<b>&lt;0.010</b>	<b>mg/L</b>	<b>No</b>
<b>Nitrate</b>	<b>Jan 8/2018</b>	<b>0.166</b>	<b>mg/L</b>	<b>No</b>
	<b>Apr 9/2018</b>	<b>0.176</b>	<b>mg/L</b>	<b>No</b>
	<b>Jul 16/2018</b>	<b>&lt;0.020</b>	<b>mg/L</b>	<b>No</b>
	<b>Oct 15/2018</b>	<b>0.043</b>	<b>mg/L</b>	<b>No</b>

\*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)

<b>Location Type</b>	<b>Number of Samples</b>	<b>Range of Lead Results (min#) – (max #)</b>	<b>Number of Exceedances</b>
<b>Plumbing</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Distribution</b>	<b>8</b>	<b>&lt;0.1 µg/L</b>	<b>0</b>

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

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
<b>Alachlor</b>	<b>Jan 8/2018</b>	<b>&lt;0.10</b>	<b>µg/L</b>	<b>No</b>
<b>Atrazine + N-dealkylated metabolites</b>	<b>Jan 8/2018</b>	<b>&lt;0.20</b>	<b>µg/L</b>	<b>No</b>
<b>Azinphos-methyl</b>	<b>Jan 8/2018</b>	<b>&lt;0.10</b>	<b>µg/L</b>	<b>No</b>
<b>Benzene</b>	<b>Jan 8/2018</b>	<b>&lt;0.50</b>	<b>µg/L</b>	<b>No</b>
<b>Benzo(a)pyrene</b>	<b>Jan 8/2018</b>	<b>&lt;0.010</b>	<b>µg/L</b>	<b>No</b>
<b>Bromoxynil</b>	<b>Jan 8/2018</b>	<b>&lt;0.20</b>	<b>µg/L</b>	<b>No</b>
<b>Carbaryl</b>	<b>Jan 8/2018</b>	<b>&lt;0.20</b>	<b>µg/L</b>	<b>No</b>
<b>Carbofuran</b>	<b>Jan 8/2018</b>	<b>&lt;0.20</b>	<b>µg/L</b>	<b>No</b>
<b>Carbon Tetrachloride</b>	<b>Jan 8/2018</b>	<b>&lt;0.20</b>	<b>µg/L</b>	<b>No</b>
<b>Chlorpyrifos</b>	<b>Jan 8/2018</b>	<b>&lt;0.10</b>	<b>µg/L</b>	<b>No</b>
<b>Diazinon</b>	<b>Jan 8/2018</b>	<b>&lt;0.10</b>	<b>µg/L</b>	<b>No</b>
<b>Dicamba</b>	<b>Jan 8/2018</b>	<b>&lt;0.20</b>	<b>µg/L</b>	<b>No</b>
<b>1,2-Dichlorobenzene</b>	<b>Jan 8/2018</b>	<b>&lt;0.50</b>	<b>µg/L</b>	<b>No</b>
<b>1,4-Dichlorobenzene</b>	<b>Jan 8/2018</b>	<b>&lt;0.50</b>	<b>µg/L</b>	<b>No</b>
<b>1,2-Dichloroethane</b>	<b>Jan 8/2018</b>	<b>&lt;0.50</b>	<b>µg/L</b>	<b>No</b>
<b>1,1-Dichloroethylene (vinylidene chloride)</b>	<b>Jan 8/2018</b>	<b>&lt;0.50</b>	<b>µg/L</b>	<b>No</b>
<b>Dichloromethane</b>	<b>Jan 8/2018</b>	<b>&lt;5.0</b>	<b>µg/L</b>	<b>No</b>
<b>2,4 Dichlorophenol</b>	<b>Jan 8/2018</b>	<b>&lt;0.30</b>	<b>µg/L</b>	<b>No</b>
<b>2,4-Dichlorophenoxy acetic acid (2,4-D)</b>	<b>Jan 8/2018</b>	<b>&lt;0.20</b>	<b>µg/L</b>	<b>No</b>
<b>Diclofop-methyl</b>	<b>Jan 8/2018</b>	<b>&lt;0.20</b>	<b>µg/L</b>	<b>No</b>

Dimethoate	Jan 8/2018	<0.10	µg/L	No
Diquat	Jan 8/2018	<1.00	µg/L	No
Diuron	Jan 8/2018	<1.00	µg/L	No
Glyphosate	Jan 8/2018	<5.00	µg/L	No
Malathion	Jan 8/2018	<0.10	µg/L	No
2-Methyl-4-chlorophenoxyacetic acid	Jan 8/2018	<0.20	µg/L	No
Metolachlor	Jan 8/2018	<0.10	µg/L	No
Metribuzin	Jan 8/2018	<0.10	µg/L	No
Monochlorobenzene	Jan 8/2018	<0.50	µg/L	No
Paraquat	Jan 8/2018	<1.00	µg/L	No
Pentachlorophenol	Jan 8/2018	<0.50	µg/L	No
Phorate	Jan 8/2018	<0.10	µg/L	No
Picloram	Jan 8/2018	<0.20	µg/L	No
Polychlorinated Biphenyls (PCB)	Jan 8/2018	<0.035	µg/L	No
Prometryne	Jan 8/2018	<0.10	µg/L	No
Simazine	Jan 8/2018	<0.10	µg/L	No
THM (NOTE: show latest annual average)	Jan 8/2018 Apr 9/2018 Jul 16/2018 Oct 15/2018	46.1	µg/L	No
HAA (NOTE: show latest annual average)	Jan 8/2018 Apr 9/2018 Jul 16/2018 Oct 15/2018	34.8	µg/L	N/A until 2020
Terbufos	Jan 8/2018	<0.20	µg/L	No
Tetrachloroethylene	Jan 8/2018	<0.50	µg/L	No
2,3,4,6-Tetrachlorophenol	Jan 8/2018	<0.50	µg/L	No
Triallate	Jan 8/2018	<0.10	µg/L	No
Trichloroethylene	Jan 8/2018	<0.50	µg/L	No
2,4,6-Trichlorophenol	Jan 8/2018	<0.50	µg/L	No
Trifluralin	Jan 8/2018	<0.10	µg/L	No
Vinyl Chloride	Jan 8/2018	<0.20	µg/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
Sodium	13.3	mg/L	Jan 30/2017