



Annual report template

OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220001423
Drinking-Water System Name:	KENORA AREA WATER TREATMENT PLANT
Drinking-Water System Owner:	CITY OF KENORA
Drinking-Water System Category:	LARGE MUNICIPAL RESIDENTIAL
Period being reported:	JANUARY 1, 2019 – DECEMBER 31, 2019

<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 [X] No []</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</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 http://www.kenora.ca</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">N/A</div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to:</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">N/A</div> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</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 5136. 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 PLC equipment and SCADA hardware – \$182,000

New pumps/motors with VFD's for Norman and Brinkman booster stations – \$39,329

Replacement of influent filter valve – \$12,690

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
Sep 26 2019	Total Coliform	Present	P/A	Total coliform was present in a sample taken from a distribution location already under a precautionary BWA. Consecutive resamples did not show presence of total coliform.	Sep 30 2019

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 – 26	0 –1730	N/A	N/A
Treated	52	Absent	Absent	52	0 – 2
Distribution	312	Absent	Absent-Present	105	0 – 4

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	0.051 - 0.116 NTU	8760	0.026 – 0.145 NTU
Chlorine	365	1.08 – 1.69 mg/L	8760	1.08 – 1.78 mg/L
Fluoride (If the DWS provides fluoridation)	365	0.13 - 0.79 mg/L	8760	0.06 – 0.74 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 2019.	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	Jan 7/2019	<0.60	µg/L	No
Arsenic	Jan 7/2019	<1.0	µg/L	No
Barium	Jan 7/2019	10	µg/L	No
Boron	Jan 7/2019	<50	µg/L	No
Cadmium	Jan 7/2019	<0.10	µg/L	No
Chromium	Jan 7/2019	<1.0	µg/L	No
*Lead	N/A	N/A	N/A	N/A
Mercury	Jan 7/2019	<0.10	µg/L	No
Selenium	Jan 7/2019	<1.0	µg/L	No
Sodium	Jan 7/2019	14.6	mg/L	No
Uranium	Jan 7/2019	<2.0	µg/L	No
Fluoride	Jan 5/2015	0.550	mg/L	No
Nitrite	Jan 7/2019	<0.010	mg/L	No
	Apr 8/2019	<0.010	mg/L	No
	Jul 9/2019	<0.010	mg/L	No
	Oct 15/2019	<0.010	mg/L	No
Nitrate	Jan 7/2019	0.094	mg/L	No
	Apr 8/2019	0.143	mg/L	No
	Jul 9/2019	<0.020	mg/L	No
	Oct 15/2019	0.061	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	N/A	N/A	N/A
Distribution	N/A	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	Jan 7/2019	<0.10	µg/L	No
Atrazine + N-dealkylated metabolites	Jan 7/2019	<0.20	µg/L	No
Azinphos-methyl	Jan 7/2019	<0.10	µg/L	No
Benzene	Jan 7/2019	<0.50	µg/L	No
Benzo(a)pyrene	Jan 7/2019	<0.010	µg/L	No
Bromoxynil	Jan 7/2019	<0.20	µg/L	No
Carbaryl	Jan 7/2019	<0.20	µg/L	No
Carbofuran	Jan 7/2019	<0.20	µg/L	No
Carbon Tetrachloride	Jan 7/2019	<0.20	µg/L	No
Chlorpyrifos	Jan 7/2019	<0.10	µg/L	No
Diazinon	Jan 7/2019	<0.10	µg/L	No
Dicamba	Jan 7/2019	<0.20	µg/L	No
1,2-Dichlorobenzene	Jan 7/2019	<0.50	µg/L	No
1,4-Dichlorobenzene	Jan 7/2019	<0.50	µg/L	No
1,2-Dichloroethane	Jan 7/2019	<0.50	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 7/2019	<0.50	µg/L	No
Dichloromethane	Jan 7/2019	<5.0	µg/L	No
2-4 Dichlorophenol	Jan 7/2019	<0.30	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 7/2019	<0.20	µg/L	No
Diclofop-methyl	Jan 7/2019	<0.20	µg/L	No
Dimethoate	Jan 7/2019	<0.10	µg/L	No
Diquat	Jan 7/2019	<1.00	µg/L	No
Diuron	Jan 7/2019	<1.00	µg/L	No
Glyphosate	Jan 7/2019	<5.00	µg/L	No
Malathion	Jan 7/2019	<0.10	µg/L	No
2-Methyl-4-chlorophenoxyacetic acid	Jan 7/2019	<0.20	µg/L	No
Metolachlor	Jan 7/2019	<0.10	µg/L	No
Metribuzin	Jan 7/2019	<0.10	µg/L	No
Monochlorobenzene	Jan 7/2019	<0.50	µg/L	No
Paraquat	Jan 7/2019	<1.00	µg/L	No



Pentachlorophenol	Jan 7/2019	<0.50	µg/L	No
Phorate	Jan 7/2019	<0.10	µg/L	No
Picloram	Jan 7/2019	<0.20	µg/L	No
Polychlorinated Biphenyls (PCB)	Jan 7/2019	<0.035	µg/L	No
Prometryne	Jan 7/2019	<0.10	µg/L	No
Simazine	Jan 7/2019	<0.10	µg/L	No
THM (NOTE: show latest annual average)	Jan 7/2019 Apr 8/2019 Jul 9/2019 Oct 15/2019	41.5	µg/L	No
HAA (NOTE: show latest annual average)	Jan 7/2019 Apr 8/2019 Jul 9/2019 Oct 15/2019	35.1	µg/L	N/A until 2020
Terbufos	Jan 7/2019	<0.20	µg/L	No
Tetrachloroethylene	Jan 7/2019	<0.50	µg/L	No
2,3,4,6-Tetrachlorophenol	Jan 7/2019	<0.50	µg/L	No
Triallate	Jan 7/2019	<0.10	µg/L	No
Trichloroethylene	Jan 7/2019	<0.50	µg/L	No
2,4,6-Trichlorophenol	Jan 7/2019	<0.50	µg/L	No
Trifluralin	Jan 7/2019	<0.10	µg/L	No
Vinyl Chloride	Jan 7/2019	<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	14.6	mg/L	Jan 7/2019