

**Part III Form 2
Section 11. ANNUAL REPORT.**

Drinking-Water System Number:	220000442
Drinking-Water System Name:	Sturgeon Falls Water Treatment Plant
Drinking-Water System Owner:	The Corporation of the Municipality of West Nipissing
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2025 to December 31, 2025

<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 [] No [x]</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; margin-top: 10px;"> Sturgeon Falls Water Treatment Plant 11 Nipissing Street, Sturgeon Falls, ON </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 50px; text-align: center;" type="text" value="0"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No [] Not Applicable [x]</p> <p>Number of Interested Authorities you report to: <input style="width: 50px; text-align: center;" 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 [] No [] Not Applicable [x]</p>
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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 [] Not Applicable [x]

Indicate how you notified system users that your annual report is available, and is free of charge.

Public access/notice via the web

Describe your Drinking-Water System

The Sturgeon Falls WTP commissioned in 1991, consists of a full surface water treatment facility, with a design capacity of 14 200 m³/day, drawing water from the Sturgeon River.

The process consists of:

- Intake from the Sturgeon River, equipped with manually removable screens
- Four vertical turbine raw water pumps
- Two up-flow pre-treatment tanks for flash mixing for chemical assisted flocculation and sedimentation
- Four sets of three-cells-in-series flocculation tanks
- Two rectangular settling tanks, each with an inclined plate settling system
- Three anthracite/sand gravity filters, each with continuous turbidity monitoring
- Chlorine gas for primary disinfection
- One chlorine contact tank equipped with baffle walls, and discharge line to the underground reservoir
- Continuous Giardia log removal calculations to monitor adequacy of disinfection
- Hydrated lime (calcium hydroxide) addition for pH and alkalinity control
- Two cell in-ground storage reservoir
- A two-chamber clear well
- Five vertical high lift turbine pumps to Distribution
- Post-chlorine gas addition to Distribution with continuous monitoring
- Hydrofluosilicic acid (fluoride) addition to Distribution with continuous monitoring
- Filter backwash system consisting of two filter backwash pumps, serving all filters
- Backwash wastewater discharge to the backwash settling tanks
- Three backwash settling tanks; supernatant return to Sturgeon River; settled sludge to sludge thickening tanks
- Two square sludge thickening tanks; sludge discharge to municipal sewage collection system; supernatant return to the Sturgeon River
- Back-up diesel powered generator capable of servicing essential plant operations

List all water treatment chemicals used over this reporting period

- Polyaluminum chloride – for coagulation
- Specialty polymer – coagulant aid
- Limestone – for raw water alkalinity adjustments to improve coagulation
- Chlorine (gas) – for primary and secondary disinfection
- Hydrated lime (calcium hydroxide) – for finished water pH adjustment
- Hydrofluosilicic acid – for fluoridation
- Corrosion control and manganese sequesterant

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

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment
- Not Applicable

Please provide a brief description and a breakdown of monetary expenses incurred

Item	Water Treatment Plant	Distribution
Operation Total	\$921,405	\$595,159
Material/Supplies/Maintenance	\$90,443	\$111,575
Process Chemicals	\$184,186	
Water Quality Lab Testing	\$18,923	
Consulting/Training	\$17,533	\$3,375
Utilities	\$210,949	\$1,113
Insurance	\$76,333	\$34,587
Labour	\$302,624	\$444,509
Electrical/Instrumentation	\$20,413	
Capital Total	\$640,284	
Maintenance – raw water turbine pump	\$49,789	
Actuator and process pump	\$37,736	
Replacement backup generator	\$552,758	

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	Units	Corrective Action	Corrective Action Date
	Nil				

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 CFU/100mL (min #)-(max #)	Range of Total Coliform Results CFU/100mL (min #)-(max #)
Raw	52	2 – 40 *	21 – 680 *
Treated	52	0 – 0	0 – 0
Distribution	260	0 – 0	0 – 0

* NDOGT (No Data Overgrown with Target) for August 4, 11, and 18 samples.

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	8760	Daily Peak: 0.01 – 0.74 NTU
Chlorine	8760	Daily Average: 0.80 – 1.59 mg/L
Fluoride	366	Daily Average: 0.00 – 0.92 mg/L

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

Date of legal instrument issued	Parameter	Sampled	Result	Unit of Measure
Feb. 18, 2021 – MDWL 202-102	Waste Residue TSS	46 samples	8.7	mg/L (annual average)

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Fluoride	2025-07-15	0.2	mg/L	No
Nitrite (N)	2025-01-14	< 0.05	mg/L	No
	2025-04-16	< 0.05		No
	2025-07-15	< 0.05		No
	2025-11-03	< 0.05		No
Nitrate (N)	2025-01-14	0.06	mg/L	No
	2025-04-16	0.08		No
	2025-07-15	< 0.05		No
	2025-11-03	< 0.05		No
Haloacetic Acids (Running Annual Averages)	2025-01-14	38.1 (50.6)	µg/L	No
	2025-04-16	46.7 (50.7)		No
	2025-07-15	81.7 (55.2)		No
	2025-11-03	52.2 (54.7)		No
Antimony	2025-07-15	< 0.0001	mg/L	No
Arsenic	2025-07-15	0.0003	mg/L	No
Barium	2025-07-15	0.011	mg/L	No
Boron	2025-07-15	< 0.005	mg/L	No
Cadmium	2025-07-15	< 0.000015	mg/L	No
Chromium	2025-07-15	< 0.0010	mg/L	No
Lead	2025-07-15	0.00008	mg/L	No
Mercury	2025-07-15	< 0.00002	mg/L	No
Selenium	2025-07-15	< 0.001	mg/L	No
Sodium	2025-07-15	1.5	mg/L	No
Uranium	2025-07-15	< 0.00005	mg/L	No
Benzene	2025-07-15	< 0.5	µg/L	No
Carbon Tetrachloride	2025-07-15	< 0.2	µg/L	No
Dichlorobenzene, 1,2-	2025-07-15	< 0.5	µg/L	No
Dichlorobenzene, 1,4-	2025-07-15	< 0.5	µg/L	No
Dichloroethane, 1,2-	2025-07-15	< 0.5	µg/L	No
Dichloroethylene, 1,1-	2025-07-15	< 0.5	µg/L	No
Dichloromethane (Methylene Chloride)	2025-07-15	< 5	µg/L	No
Monochlorobenzene (Chlorobenzene)	2025-07-15	< 0.5	µg/L	No
Tetrachloroethylene	2025-07-15	< 0.5	µg/L	No
Trichloroethylene	2025-07-15	< 0.5	µg/L	No
Vinyl Chloride	2025-07-15	< 0.2	µg/L	No

Total Trihalomethanes (Running Annual Averages)	2025-01-14 2025-04-16 2025-07-15 2025-11-03	50.0 (54.5) 48.0 (53.8) 88.0 (56.8) 69 (63.8)	µg/L	No No No No
Alachlor	2025-07-15	< 0.3	µg/L	No
Atrazine + Metabolites	2025-07-15	< 0.5	µg/L	No
Azinphos-methyl	2025-07-15	< 1	µg/L	No
Benzo(a)pyrene	2025-07-15	< 0.006	µg/L	No
Bromoxynil	2025-07-15	< 0.5	µg/L	No
Carbaryl	2025-07-15	< 3	µg/L	No
Carbofuran	2025-07-15	< 1	µg/L	No
Chlorpyrifos	2025-07-15	< 0.5	µg/L	No
Diazinon	2025-07-15	< 1	µg/L	No
Dicamba	2025-07-15	< 1.0	µg/L	No
Dichlorophenol, 2,4-	2025-07-15	< 0.2	µg/L	No
Dichlorophenoxy acetic acid, 2,4- (2,4-D)	2025-07-15	< 1.0	µg/L	No
Diclofop-methyl	2025-07-15	< 0.9	µg/L	No
Dimethoate	2025-07-15	< 1	µg/L	No
Diquat	2025-07-15	< 5	µg/L	No
Diuron	2025-07-15	< 5	µg/L	No
Glyphosate	2025-07-15	< 25	µg/L	No
Malathion	2025-07-15	< 5	µg/L	No
2 methyl-4-chlorophenoxyacetic acid (MCPA)	2025-07-15	< 10	µg/L	No
Metolachlor	2025-07-15	< 3	µg/L	No
Metribuzin	2025-07-15	< 3	µg/L	No
Paraquat	2025-07-15	< 1	µg/L	No
Pentachlorophenol	2025-07-15	< 0.2	µg/L	No
Phorate	2025-07-15	< 0.3	µg/L	No
Picloram	2025-07-15	< 5.0	µg/L	No
Poly-Chlorinated Biphenyls (PCB's)	2025-07-15	< 0.05	µg/L	No
Prometryne	2025-07-15	< 0.1	µg/L	No
Simazine	2025-07-15	< 0.5	µg/L	No
Terbufos	2025-07-15	< 0.5	µg/L	No
Tetrachlorophenol, 2,3,4,6-	2025-07-15	< 0.2	µg/L	No
Triallate	2025-07-15	< 10	µg/L	No
Trichlorophenol 2,4,6-	2025-07-15	< 0.2	µg/L	No
Trifluralin	2025-07-15	< 0.5	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
Nil			