



**ONTARIO CLEAN WATER AGENCY**  
**AGENCE ONTARIENNE DES EAUX**

**SAUGEEN SHORES**  
**DRINKING WATER SYSTEM**

Large Municipal Residential

**SCHEDULE 22**  
**SUMMARY REPORT**

**For the period of**  
**JANUARY 1, 2022 TO DECEMBER 31, 2022**

Prepared by the Ontario Clean Water Agency  
For The Corporation of the Town of Saugeen Shores

This report was prepared in accordance with the requirements of [O.Reg 170/03, Schedule 22, Summary Reports for Municipalities](#) for the following system and reporting period:

<b>Drinking-Water System Number:</b>	210000078
<b>Drinking-Water System Name:</b>	Saugeen Shores Drinking Water System
<b>Drinking-Water System Owner:</b>	Town of Saugeen Shores
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2022 – December 31, 2022

## 1. Issues of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on February 9, 2022 for the period covering March 3, 2021 to February 8, 2022. On March 9, 2022 the Inspection Report was issued. An Inspection Summary Rating Record (IRR) of 96.25% was received.

The following is a summary of non-compliances noted in the MECP Inspection Report, as well as the duration and the measures that were taken to correct the non-compliance. If any self-reported non-compliances were included in the inspection report, they will be noted in Table 1.

**Table 1. Non-Compliances and Corrective Actions noted in the 2021/2022 MECP Inspection Report**

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
All continuous monitoring equipment utilized for sampling and testing required by O. Reg.170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were not equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6. The SCADA system did not alarm for a malfunction/loss of signal when the control board on the filter turbidimeters failed. This incident was self-reported.	15 hours	Regulatory Corrective Actions were completed, including correction of the failure of the alarm to signal and notify operators of an equipment malfunction/loss of power applicable to the incident.

The following table (Table 2) is a summary of any incidents that the Operating Authority interpreted as instances where any requirements of the Act, the regulations, the system’s approval, drinking water works permit (DWWP), municipal drinking water licence (MDWL), and any orders applicable were not met. The Operating Authority reported the following incidents to the MECP:

**Table 2. Self-Reported Incidents and Corrective Actions for the Reporting Period**

Reported Non-Compliance(s)	Duration	Required Actions & Corrective Actions
The microbiological samples for the week of May 24-27, 2022 arrived late at the lab due to a courier issue. The	n/a	- Re-samples were taken on May 26, 2022 and sent to the laboratory right away. - The laboratory followed up with Purolator.

re-samples taken on May 26, 2022 were past the 5-10 days specified in O. Reg 170/03.	- The sampling schedule for the week of May 30-June 3 was adjusted to assure the samples are taken 5 to 10 days from the samples taken May 26.
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For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Saugeen Shores Drinking Water System Annual Report (Section 11).

## 2. Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows as well as a comparison to the rated capacity and flow rates approved in the system’s approval, DWWP or MDWL.

### 2.1 Treated Water

<b>Municipal Drinking Water License (MDWL):</b>	093-101 (Issue Number: 3)
<b>Allowable Rated Capacity:</b>	18,000 m <sup>3</sup> /day
<b>Allowable Flowrate into Treatment System:</b>	N/A

As per the MDWL, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the listed rated capacity. However, the MDWL allows a system to be operated temporarily at a maximum daily volume and/or a maximum flowrate above the values set out in the MDWL for the purposes of fighting a large fire or for the maintenance of the drinking water system.

**Table 3. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for 2022**

2022	Treated Water Flow				
	Average Flow (m <sup>3</sup> /day)	Percent of Rated Capacity	Maximum Flow (m <sup>3</sup> /day)	Percent of Rated Capacity	Total Volume (m <sup>3</sup> )
January	4,623	25.7%	4,909	27.3%	143,302
February	4,420	24.6%	4,799	26.7%	123,756
March	4,489	24.9%	4,776	26.5%	139,153
April	4,587	25.5%	5,094	28.3%	137,600
May	5,771	32.1%	7,382	41.0%	178,908
June	6,761	37.6%	8,950	49.7%	202,820
July	7,904	43.9%	9,243	51.4%	245,022
August	7,541	41.9%	8,852	49.2%	233,762
September	6,617	36.8%	8,403	46.7%	198,525
October	5,268	29.3%	6,350	35.3%	163,293
November	4,993	27.7%	5,495	30.5%	149,796
December	4,773	26.5%	6,769	37.6%	147,972
<b>2022</b>	<b>5,655</b>	<b>31.4%</b>	<b>9,243</b>	<b>51.4%</b>	<b>2,063,910</b>

A review of flow information for the reporting period indicates that the drinking water system operated within the rated capacity specified in the MDWL, for the maximum volume of treated water that flows from the treatment subsystem to the distribution system.

**Table 4. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to the Effective Treatment Capacity (13,775 m<sup>3</sup>) for 2022**

2022	Treated Water Flow			
	Average Flow (m <sup>3</sup> /day)	Percent of Effective Treatment Capacity	Maximum Flow (m <sup>3</sup> /day)	Percent of Effective Treatment Capacity
January	4,623	33.6%	4,909	35.6%
February	4,420	32.1%	4,799	34.8%
March	4,489	32.6%	4,776	34.7%
April	4,587	33.3%	5,094	37.0%
May	5,771	41.9%	7,382	53.6%
June	6,761	49.1%	8,950	65.0%
July	7,904	57.4%	9,243	67.1%
August	7,541	54.7%	8,852	64.3%
September	6,617	48.0%	8,403	61.0%
October	5,268	38.2%	6,350	46.1%
November	4,993	36.2%	5,495	39.9%
December	4,773	34.6%	6,769	49.1%

The effective treatment capacity has been observed to be at 13,775 m<sup>3</sup> which is below the rated capacity set out in the MDWL of 18,000 m<sup>3</sup>.

**Table 5. Treated Water Annual and Monthly Average and Maximum Flowrates for 2022**

2022	Treated Water: Zone 1		Treated Water: Zone 2	
	Average Flowrate (l/s)	Maximum Flowrate (l/s)	Average Flowrate (l/s)	Maximum Flowrate (l/s)
January	19.98	69.27	33.53	113.36
February	19.25	69.27	31.90	112.50
March	18.79	69.15	33.17	138.36
April	19.74	69.09	33.34	115.83
May	24.75	155.46 <sup>4a</sup>	42.04	159.89 <sup>4a</sup>
June	28.49	69.74	49.76	115.92
July	34.26	69.50	57.23	117.35
August	32.64	69.65	54.63	114.19
September	27.78	69.63	48.81	114.98
October	21.71	69.74	39.26	117.10
November	19.10	69.66	38.70	115.64
December	18.54	69.49	36.70	115.46
2022	23.79	155.46*	41.66	159.89*

<sup>4a</sup>Flow meter calibrations

The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into a treatment subsystem. A summary of flowrates of water that flows into the treatment system can be found in Table 7.

## 2.2 Raw Water

<b>Permit to Take Water Number:</b>	1133-AQQLPH
<b>Allowable Maximum Raw Water Volume – Lake Huron:</b>	18,020 m <sup>3</sup> /day
<b>Allowable Maximum Raw Water Flowrate – Lake Huron:</b>	18,000 L/min

As per the PTTW, water shall only be taken from the specified source(s) and at the rates and amounts taken as specified in the permit.

**Table 6. Raw Water (Lake Huron) Monthly Average, Maximum Flow and Total Volume for 2022**

Timeframe	Raw Water Flow – Lake Huron				
	Average Flow (m <sup>3</sup> /day)	Percent of Allowable Volume	Maximum Flow (m <sup>3</sup> /day)	Percent of Allowable Volume	Total Volume (m <sup>3</sup> )
January	5,096	28.3%	5,412	30.0%	157,970
February	4,914	27.3%	5,339	29.6%	137,591
March	4,958	27.5%	5,340	29.6%	153,712
April	5,059	28.1%	5,621	31.2%	151,769
May	6,249	34.7%	8,020	44.5%	193,725
June	7,382	41.0%	9,727	54.0%	221,477
July	8,643	48.0%	10,108	56.1%	267,939
August	8,191	45.5%	9,380	52.1%	253,919
September	7,198	39.9%	9,047	50.2%	215,958
October	5,747	31.9%	6,840	38.0%	178,156
November	5,385	29.9%	5,919	32.8%	161,558
December	5,256	29.2%	7,924	44.0%	162,945
<b>2022</b>	<b>6,183</b>	<b>34.3%</b>	<b>10,108</b>	<b>56.1%</b>	<b>2,256,717</b>

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume.

**Table 7. Raw Water (Lake Huron) Annual and Monthly Average and Maximum Flowrates for 2022**

<b>2022</b>	<b>Raw Water</b>	
	<b>Average Flowrate (l/s)</b>	<b>Maximum Flowrate (l/s)</b>
<b>January</b>	58.98	181.88
<b>February</b>	56.87	224.35
<b>March</b>	57.39	193.54
<b>April</b>	58.55	212.27
<b>May</b>	72.33	250.10
<b>June</b>	85.45	227.99
<b>July</b>	100.04	237.89
<b>August</b>	94.80	230.10
<b>September</b>	83.32	226.88
<b>October</b>	66.52	212.25
<b>November</b>	62.33	213.99
<b>December</b>	60.84	218.27
<b>2022</b>	<b>71.56</b>	<b>250.10</b>

A review of flow information for the reporting period indicates that the system operated within the PTTW’s maximum allowable raw water flowrate.