



ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

CHATSWORTH
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 Township of Chatsworth

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:

Drinking-Water System Number:	210003011
Drinking-Water System Name:	Chatsworth Drinking Water System
Drinking-Water System Owner:	Township of Chatsworth
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2022 – December 31, 2022

1. Issue(s) of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on February 1, 2022 for the period covering February 8, 2021 to February 1, 2022. On May 5, 2022 the Inspection Report was issued and on February 6, 2023 an Inspection Summary Rating Record (IRR) of 89.5% 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
The operations and maintenance manuals did not meet the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.	N/A	The O&M Manual was updated to include the appropriate standard operating procedures.
The operations and maintenance manuals did not contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.	N/A	The appropriate drawings were added to the O&M Manual.
All changes to the system registration information were not provided within ten (10) days of the change.	N/A	The DWIS profiles were updated with the current contact information.
Measures were not in place to protect the groundwater and/or GUDI source in accordance with any the Municipal Drinking Water Licence and Drinking Water	N/A	Below grade well inspections were performed on Wells 1 & 2.

Works Permit issued under Part V of the SDWA.		
Primary disinfection chlorine monitoring was not conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved.	N/A	The standard operating procedure for the chlorine contact simulator was revised to include a description.

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 and confirmation of whether the incidents are considered non-compliances are noted in the MECP Inspection Report and included in Table 1.

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

Incident	Duration	Corrective Actions
N/A	N/A	N/A

For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Chatsworth 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 Well #1 and #2 Combined Water

Municipal Drinking Water License (MDWL):	241-102 (Issue Number: 4)
Allowable Rated Capacity:	763 m ³ /day
Allowable Flowrate into Treatment System:	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. Combined^{3a} Well #1 and Well #2 Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for 2022

Timeframe	Combined Well #1 & Well #2 Water Flow				
	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	162.9	21.3%	269.4	35.3%	5,049
February	142.0	18.6%	167.9	22.0%	3,976
March	142.7	18.7%	222.4	29.1%	4,423
April	153.5	20.1%	215.4	28.2%	4,606
May	175.7	23.0%	285.2	37.4%	5,446
June	183.0	24.0%	370.7	48.6%	5,490
July	176.7	23.2%	242.1	31.7%	5,479
August	147.6	19.3%	225.3	29.5%	4,576
September	144.2	18.9%	177.6	23.3%	4,324
October	147.4	19.3%	207.8	27.2%	4,568
November	132.6	17.4%	233.2	30.6%	3,978
December	150.7	19.7%	323.3	42.4%	4,671
2022	154.9	20.3%	370.7	48.6%	56,588

^{3a}Based off the combined raw water flow for Wells #1 and #2. Raw water is pumped from either Well #1 or #2 into a common discharge header then directed through the treatment process and into the distribution system.

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 combined well water that flows from the treatment subsystem to the distribution system.

2.2 Raw Water

Permit to Take Water Number:	3802-9L2JFM
Allowable Maximum Raw Water Volume - Well #1:	818.2 m ³ /day
Allowable Maximum Raw Water Flowrate - Well #1:	569 L/min
Allowable Maximum Volume of Raw Water - Well #2:	818.2 m ³ /day
Allowable Maximum Raw Water Flowrate – Well #2:	569 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 4. Raw Water (Well #1) Monthly Average, Maximum Flow and Maximum Flowrates for 2022

Timeframe	Raw Water Flow – Well #1				
	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	0.52	0.1%	6.49	0.8%	16
February	0.17	0.0%	2.76	0.3%	5
March	0.31	0.0%	5.98	0.7%	10
April	0.32	0.0%	4.50	0.6%	10
May	0.39	0.0%	6.51	0.8%	12
June	0.39	0.0%	6.66	0.8%	12
July	0.49	0.1%	6.00	0.7%	15
August	0.35	0.0%	4.20	0.5%	11
September	0.28	0.0%	2.78	0.3%	8
October	0.23	0.0%	3.23	0.4%	7
November	0.34	0.0%	3.86	0.5%	10
December	0.32	0.0%	3.26	0.4%	10
2022	0.34	0.0%	6.66	0.8%	126

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume for Well #1.

Table 5. Raw Water (Well #1) Annual and Monthly Average and Maximum Flowrates for 2022

Timeframe	Raw Water Flowrate – Well #1	
	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	0.01	6.72
February	0.00	6.87
March	0.00	6.80
April	0.00	7.00
May	0.00	7.04
June	0.00	6.97
July	0.01	6.92
August	0.00	7.05
September	0.00	6.72
October	0.00	6.56
November	0.00	6.65
December	0.00	7.05
2022	0.00	7.05

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate for Well #1.

Table 6. Raw Water (Well #2) Monthly Average and Maximum Flow and Total Volume for 2022

Timeframe	Raw Water Flow – Well #2				
	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	162.4	19.8%	269.4	32.9%	5,033
February	141.8	17.3%	167.9	20.5%	3,972
March	142.4	17.4%	222.4	27.2%	4,413
April	153.2	18.7%	215.4	26.3%	4,597
May	175.3	21.4%	285.2	34.9%	5,434
June	182.6	22.3%	370.7	45.3%	5,478
July	176.2	21.5%	242.1	29.6%	5,464
August	147.3	18.0%	225.3	27.5%	4,566
September	143.9	17.6%	176.3	21.6%	4,316
October	147.1	18.0%	207.8	25.4%	4,561
November	132.2	16.2%	233.2	28.5%	3,967
December	150.4	18.4%	323.3	39.5%	4,661
2022	154.6	18.9%	370.7	45.3%	56,462

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume for Well #2.

Table 7. Raw Water (Well #2) Annual and Monthly Average and Maximum Flowrates for 2022

Timeframe	Raw Water Flowrate – Well #2	
	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	1.88	7.25
February	1.64	7.17
March	1.66	7.14
April	1.77	7.33
May	2.03	7.77
June	2.11	7.55
July	2.04	7.54
August	1.70	7.00
September	1.66	6.99
October	1.70	6.82
November	1.50	6.78
December	1.74	8.37
2022	1.79	8.37

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate for Well #2.