



THE CORPORATION OF THE TOWNSHIP OF KING
Report to Committee of the Whole

Monday, March 20, 2023

Public Works Department - Environmental Division
Report Number PW-ENV-2023-002
2022 Water Summary Report

RECOMMENDATION(S):

The Director of Public Works respectfully submits the following recommendation(s):

1. Report Number PW-ENV-2023-002 be received

REPORT HIGHLIGHTS:

- Public Works Department has prepared an Annual Report for each of the four municipal drinking water systems as required under Section 11 of O.Reg.170/03.
- Regulatory sampling within the Township met all applicable requirements with the exception of 2 Adverse Water Quality Incidents (AWQI).
- Accreditation can continue to be offered to the Township.

PURPOSE:

This report is to inform Council that the Public Works Department has prepared an Annual Report for each of the four municipal drinking water systems as required under Section 11 of O.Reg.170/03 using the standard Ministry of the Environment Conservation and Parks (MECP) templates. Annual Reports will be posted on the Township website and are available to the public at no cost. This report also fulfills the requirement to provide members of Council with an Annual Summary Report as outlined in Schedule 22 of O.Reg.170/03.

BACKGROUND:

Annual Summary Report for Council

The Annual Summary Report is to enable the owner of the water systems to assess the capability of meeting the existing and planned uses of the systems. The required contents of the Summary Report for municipal Council members are specified in Schedule 22 of O.Reg. 170/03.

The Summary Report must provide the following information to decision makers:

1. List the requirements of the Safe Drinking Water Act (SDWA), the regulations, the system's approval, drinking water works permit, municipal drinking water license, and any orders applicable to the system that were not met at any time during the period covered by the report.
2. For each requirement that was not met, specify the duration of the failure and the measures that were taken to correct the failure.

3. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
4. A comparison of the summary referred to in point (3) to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water license, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4) of O.Reg. 170/03, to the flow rates specified in the written agreement.

This Summary Report for council members will be made available on the Township website and copies will be available free of charge from the Public Works Department.

Standard of Care Provision of the Safe Drinking Water Act

The statutory standard of care is outlined within section 19 of the SDWA, and states every owner of a municipal drinking water system or any person who oversees the operating authority or exercises decision making authority, shall:

- Exercise the level of care, diligence and skill in respect of a municipal drinking water system that a reasonably prudent person would be expected to exercise in a similar situation; and
- Act honestly, competently and with integrity, with a view to ensuring the protection and safety of the users of the municipal drinking water system.

Failure to comply with section 19 of the SDWA is an offence and could result in the prosecution of an individual, corporation or both.

ANALYSIS:

King City

System Description

The King City Drinking Water System (DWS) currently services a population of approximately 7,024 people, consists of roughly 77 kilometers of watermains and approximately 2,464 connections. The King City system is classified as a Large Municipal Residential System – Class 1.

Water Quality

The King City DWS experienced the following adverse water quality incident (AWQI):

On August 23, 2022 staff were notified of the presence of Total Coliform. Staff responded to this AWQI by cleaning the sample station and re-sampling upstream, downstream and at the location of the adverse. The AWQI was resolved on August 23, 2022.

Water Systems Capacity Assessment

The maximum daily flow of 5,458 m³ occurred on August 11, 2022 with an overall average daily flow of 2,645 m³, for the reporting period from January 2022 to December 2022 (statistical flow data provided by the Region of York).

Water System Upgrades/Repairs

There were two watermain leak repairs required within King City, in 2022.

In 2022, approximately 1200 m of new watermain was authorized as a future alteration within the King City East Development.

Nobleton

System Description

The Nobleton DWS currently services a population of approximately 5,883 people, consists of approximately 49 kilometers of watermains with approximately 2,065 connections. The Nobleton system is classified as a Large Municipal Residential System – Class 1.

Water Quality

Regulatory sampling within Nobleton met all applicable requirements. There were no Adverse Water Quality Incidents in 2022.

Water Systems Capacity Assessment

The maximum daily flow of 4,359 m³ occurred on July 22, 2022 with an overall average daily flow of 2,016 m³, for the reporting period from January 2022 to December 2022 (statistical flow data provided by the Region of York).

Water System Upgrades/Repairs

There were two watermain leak repairs required within Nobleton, in 2022.

Schomberg

System Description

The Schomberg DWS services a population of approximately 2,353 people, consists of approximately 16 kilometers of watermains and approximately 874 connections. The Schomberg system is classified as a Large Municipal Residential System – Class 1.

There are 6 residential service connections within the Schomberg DWS that service residents of the Town of New Tecumseth on the North side of Highway 9. Staff have forwarded a copy of the Annual Water Quality Report for Schomberg to the Town of New Tecumseth.

Water Quality

Regulatory sampling within Schomberg met all applicable requirements. There were no Adverse Water Quality Incidents in 2022.

There is an enhanced monitoring and sampling plan in place for both the Township and York Region to closely monitor and manage the nitrification challenges within the Schomberg DWS. The Township continues to flush, as required and completed swabbing in the problem areas of the Schomberg DWS in 2022.

The Schomberg DWS was granted a regulatory relief from the Ministry of the Environment, Conservation and Parks (MECP) to increase the maximum concentration of chloramines. This is reflected in Schedule D of Schomberg's Municipal Drinking Water License, Issue 4.

York Region is currently working on a biological filtration pilot project, to revise the current treatment processes/technologies in place within the Schomberg system to better address the on-going nitrification issues.

Water Systems Capacity Assessment

The maximum daily flow of 3,224 m³ occurred on June 23, 2022 with an overall average daily flow of 1,801 m³, for the reporting period from January 2022 to December 2022 (statistical flow data provided by the Region of York).

Water System Upgrades/Repairs

There was one watermain leak repair required within Schomberg, in 2022.

Approximately 1 km of existing watermain was lined using CIPP, along Western Ave., Castlewood Ave., and Elmwood Ave., in 2022.

Ansnorveldt

System Description

The Ansnorveldt DWS services a population of approximately 158 people, consists of roughly 1.4 kilometers of watermains and approximately 57 connections. The Ansnorveldt system is classified as a Small Municipal Residential System – Class 1.

Water Quality

The Ansnorveldt DWS experienced the following adverse water quality incident (AWQI):

- On July 11, 2022 staff were notified of the presence of total coliform. Staff responded to the AWQI by re-sampling upstream, downstream and at the location of the adverse.
- On July 14, 2022 staff were notified the re-sample at the location of the adverse still contained a presence of total coliform, however, the upstream and downstream samples came back clean. Staff responded to the AWQI by re-sampling upstream, downstream and at the location of the adverse.
- On July 14, 2022 staff were notified the re-sample at the location of the adverse still contained a presence of total coliform, however, the upstream and downstream samples came back clean. Staff responded to the AWQI by flushing the water main, cleaning the sample station and collecting four consecutive sets of samples upstream, downstream and at the location of the adverse. All four consecutive sets of samples returned with no presence of total coliform.
- The AWQI was resolved on July 22, 2022. It is believed the source of the contaminates came from the sample station itself which has since been replaced.

Water Systems Capacity Assessment

The maximum daily flow of 93 m³ occurred on July 15, 2022 with an overall average daily flow of 41 m³, for the reporting period from January 2022 to December 2022 (statistical flow data provided by the Region of York).

Water System Upgrades/Repairs

There were no repairs or upgrades within the Ansnorveldt DWS.

Water Systems Capacity Assessment

The Township of King receives all of its drinking water from York Region. The Township does not have a written agreement with York Region that specifies flow rates or limits for the provision of drinking water and therefore is not able to provide a comparison under Schedule 22 of O.Reg. 170/03.

2022 MECP Inspection

The 2022 MECP inspections for our 4 drinking water systems were completed February 06, 2023. There were no non-conformance items and no suggestions for improvement for the Ansnorveldt, Nobleton and King City Drinking Water Systems.

For the Schomberg DWS there was one non-conformance item, per below:

- Per condition 1 of Schedule C of Schomberg's Municipal Drinking Water License (MDWL), the Township is required to take in-house nitrite samples at a set frequency and during a specific

time of the year. If an in-house nitrite result is greater than 0.9mg/L, the Town must submit a sample for analysis to a licensed lab.

- On January 6, 2022 an in-house nitrite sample of 0.96mg/L was measured but an additional sample was not collected and sent to a licensed lab.

Since January 6, 2022 staff have revised the Schomberg nitrite monitoring program, created a new standard operating procedure and revised another SOP to reiterate these requirements.

The inspection for the Schomberg DWS also made note of one suggestion for improvement. Staff have been made aware of this suggestion and have implemented corrective actions.

Municipal Drinking Water License Program

Accreditation

Re-accreditation is required every 3 years, in between the re-accreditation audits, surveillance audits are conducted. The Township received re-accreditation by SAI Global in July 2022, the Audit Report identified no non-conformities and provided five Opportunities for Improvement that staff have responded to accordingly. As such, accreditation can continue to be offered to the Township.

Municipal Drinking Water Licenses (MDWL)

No updates during this reporting period for the following MDWLs:

- King City License: 121-103 Issue 3
- Nobleton License: 121-102 Issue 3
- Schomberg License: 121-101 Issue 4
- Ansnorveldt License: 121-104 Issue 3

Drinking Water Works Permits (DWWP)

No updates during this reporting period for the following DWWPs:

- King City Permit: 121-203 Issue 5
- Nobleton Permit: 121-102 Issue 4
- Schomberg Permit: 121-101 Issue 4
- Ansnorveldt Permit: 121-104 Issue 4

All MDWLs and DWWPs can be found on the Township's website: <https://www.king.ca/township-services/water/water-permits-licences>

Regulatory Changes

- April 2022, the MECP made revisions to O. Reg. 170/03 – Drinking Water Systems. No major impacts to the Township's Drinking Water Systems.
- April 2022, the MECP release a revised list of potential hazardous events for Municipal Drinking Water Systems. The list included considerations for cyber security threats.
- In March 2022, Health Canada posted less stringent Canadian Drinking Water Quality Guidelines for two pesticides, 2-methyl-4-chlorophenoxyacetic acid (MCPA) and Bromoxynil, based on more recent scientific studies. Health Canada also posted a revised guideline document that reaffirmed the Canadian Drinking Water Quality Guideline for 2,4-dichlorophenoxyacetic acid (2,4-D).
- Health Canada, has introduced three new guidance documents for parameters that can impact drinking water:

- [Guidance Document: Overview of the Microbiological Aspects of Drinking Water Quality](#)
- [Guidance on Natural Organic Matter in Drinking Water](#)
- [Guidance on Monitoring the Biological Stability of Drinking Water in Distribution Systems](#)

FINANCIAL CONSIDERATIONS:

There are no financial implications associated with this report as it is for information purposes only. The water and wastewater budget is fully recoverable from the water and wastewater rate as part of the annual budget process.

ALIGNMENT TO STRATEGIC PLAN:

The 2019-2022 Corporate Strategic Plan was formally adopted by Council on September 21, 2020 which emphasizes all of the ICSP Pillars (Financial, Economic, Socio-Cultural and Environmental) and is also aligned with the long-term vision defined in the Official Plan. The 2019-2022 Corporate Strategic Plan aims to ensure staff initiatives focus on current Term of Council priorities in support of the Township's long-term vision to 2031.

This report is in alignment with the CSP's Priority Area(s), associated Objective(s) and/or Key Action(s):



**Cultivating Safe,
Healthy and
Resilient
Communities**

Promoting Public Safety

- Manage Organizational Risk

Strengthening Resilience

- Strengthen Environmental Systems

The 2022 Summary Reports help to ensure the public and council are aware of the current state of King's drinking water systems and helps to ensure the Township continues to provide safe and reliable drinking water.

CONCLUSION:

The Township of King continues to provide safe municipal drinking water to all our residents, businesses, and visitors through the Ansnorveldt, King City, Nobleton, and Schomberg water distribution systems.

Current operational performance and the on-going implementation of the Township's Quality Management System for Drinking Water is effective.

ATTACHMENTS:

[Nobleton Annual Report \(2022\)](#)

[Ansnorveldt Annual Report \(2022\)](#)

[Schomberg Annual Report \(2022\)](#)

[King City Annual Report \(2022\)](#)

Prepared By:

Daniel Wilkinson
Project Manager - Environment

Recommended By:

Samantha Fraser
Director of Public Works

Approved for Submission By:

Daniel Kostopoulos
Chief Administrative Officer

ANNUAL REPORT

Drinking-Water System Number:	260002577
Drinking-Water System Name:	Nobleton
Drinking-Water System Owner:	Township of King
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2022 to December 31, 2022

<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;"> <p>Township of King 2585 King Road King City, ON L7B 1A1 www.king.ca</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input type="text"/></p> <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: <input type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
---	---

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
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 [X] NA

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

[X] Public access/notice via the web



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

- 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: Standard of Care, Report to Council

Describe your Drinking-Water System

Distribution System Class 1
 Receives all treated water from Region of York water treatment plant and groundwater wells.
 Secondary disinfection is provided through the maintenance of chlorine residual.

List all water treatment chemicals used over this reporting period

Refer to York Region Annual Report for the Nobleton Water Supply System.

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

February 16, 2022 – WM leak repair at 14 Noblewood Dr. - \$5,295.18
Nov. 03, 2022- WM leak repair at 3 Henry Gate – \$11,585.00

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

There were no reportable incidents in the Nobleton DWS

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date



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

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 Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	208	Absent	Absent	104	0-27

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 #)
Chlorine	382	0.93-2.70
Fluoride (If the DWS provides fluoridation)	N/A	

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

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:

Not Applicable

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or the most recent sample results. **Township values reflect the latest sample. Refer to York Region's Annual Report, available on their website, for complete test results.**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				



Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite	Nov. 21, 2022	<0.05	mg/L	None
Nitrate	Nov. 21, 2022	<0.50	mg/L	None

*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 - mg/L (min#) – (max #)	Number of Exceedances
Plumbing		N/A	
Distribution (Alkalinity and pH for both sessions)	6	241-258	None

Note that all four of the Township Drinking Water Systems are subject to the “exemption” protocols

Summary of Organic parameters sampled during this reporting period or the most recent sample results. Township values an average of the sample results for the Report year. Refer to York Region’s Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				



Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2,4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acid (HAA)	Feb.28/22 May 30/22 Sep.06/22 Nov.21/22	10.25	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest annual average)	Feb.28/22 May 30/22 Sep.06/22 Nov.21/22	28.70	µg/L	None
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				



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

2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

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
Alkalinity	258.00	mg/L	Sept. 12/22

ANNUAL REPORT

Drinking-Water System Number:	260034372
Drinking-Water System Name:	Ansnoerveldt
Drinking-Water System Owner:	Township of King
Drinking-Water System Category:	Small Municipal Residential
Period being reported:	January 1, 2022 to December 31, 2022

<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;"> <p>Township of King 2585 King Road King City, ON L7B 1A1 www.king.ca</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; width: 50px; text-align: center; margin: 0 auto;">0</div></p> <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: <div style="border: 1px solid black; width: 50px; height: 15px; margin: 0 auto;"></div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
---	--

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
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 [X] NA

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

[X] Public access/notice via the web



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

- 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: Report to Council

Describe your Drinking-Water System

Distribution System Class 1
 Receives all treated water from Region of York water treatment plant and groundwater wells.
 Secondary disinfection is provided through the maintenance of chlorine residual.

List all water treatment chemicals used over this reporting period

Refer to York Region Annual Report for the Ansnorveldt Water Supply System.

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

N/A

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
July 11, 2022	Total Coliform	Present	Present/ Absent	Re-sampled up-stream, down-stream and at adverse location.	July 12, 2022
July 14, 2022	Total Coliform	Present	Present/ Absent	Re-sampled up-stream, down-stream and at adverse location.	July 14, 2022
July 15, 2022	Total Coliform	Present	Present/ Absent	Flushed mains, cleaned sample station, four consecutive sets of re-sample up-stream, down-stream and at	July 15 – July 22, 2022



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

				adverse location were taken and all four sets came back with no presence of TC.	
--	--	--	--	---	--

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 Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	107	Absent	Absent – Present	101	0-56

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 #)
Chlorine	225	0.15-2.12
Fluoride (If the DWS provides fluoridation)	N/A	

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

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:

Not Applicable

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results. **Township values reflect the latest sample. Refer to York Region's Annual Report, available on their website, for complete test results.**



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite	Nov. 21, 2022	<0.05	mg/L	No
Nitrate	Nov. 21, 2022	<0.50	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 - mg/L (min#) – (max #)	Number of Exceedances
Plumbing		N/A	
Distribution (Alkalinity)	2	166	0

Note that all four of the Township Drinking Water Systems are subject to the “exemption” protocols

Summary of Organic parameters sampled during this reporting period or the most recent sample results. Township values an average of the sample results for the Report year. Refer to York Region’s Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				



Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2,4-Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acid (HAA)	Feb.28/22 May.30/22 Sep.06/22 Nov.21/22	11.00	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest annual average)	Feb.28/22 May.30/22 Sep.06/22 Nov.21/22	60.95	µg/L	None



Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

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
THM	60.95	µg/L	Running Average

ANNUAL REPORT

Drinking-Water System Number:	260005151
Drinking-Water System Name:	Schomberg
Drinking-Water System Owner:	Township of King
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2022 to December 31, 2022

<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;"> <p>Township of King 2585 King Road King City, ON L7B 1A1 www.king.ca</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 80px;" type="text"/></p> <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: <input style="width: 80px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
---	---

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
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 [X] NA

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

[X] Public access/notice via the web



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

- 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: Standard of Care, Report to Council

Describe your Drinking-Water System

Distribution System Class 1
 Receives all treated water from Region of York water treatment plant and groundwater wells. Secondary disinfection was provided by chloramination and has been measured as combined chlorine residual (chloramines).

List all water treatment chemicals used over this reporting period

Refer to York Region Annual Report for the Schomberg Water Supply System.

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

Jan. 17, 2022 – WM leak repair at Magnum Dr.- \$4,200

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

There were no reportable incidents in the Schomberg DWS

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date

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 Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	158	Absent	Absent-Present	78	0-36

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 #)
Chloramine	381	1.54-*3.84 (Combined)
Fluoride (If the DWS provides fluoridation)	N/A	

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

*Regulatory Relief granted by MECP for Max. Concentration of Chloramines of 4.0 mg/L per Schedule D of License 121-101 Issue 4.

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. Township values reflect the latest sample.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
Schedule C of License 121-101 Issue 4.	NDMA	Quarterly	<.0009	µg/L
Schedule C of License 121-101 Issue 4.	Nitrite	Feb.28/22 May 30/22 Sept.06/22 Nov. 21. 2022	0.73 0.52 0.39 0.44	mg/L

Summary of Inorganic parameters tested during this reporting period or the most recent sample results. Township values reflect the latest sample. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				



Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate	Nov. 21. 2022	<0.50	mg/L	None

*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 - mg/L (min#) – (max #)	Number of Exceedances
Plumbing		N/A	
Distribution (Alkalinity)	4	306-311	None

Note that all four of the Township Drinking Water Systems are subject to the “exemption” protocols

Summary of Organic parameters sampled during this reporting period or the most recent sample results. **Township values an average of the sample results for the Report year. Refer to York Region’s Annual Report, available on their website, for complete test results.**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				



Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2,4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acid (HAA)	Feb.28/22 May 30/22 Sept.06/22 Nov.21/22	<8.0	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest annual average)	Feb.28/22 May 30/22 Sept.06/22 Nov.21/22	4.93	µg/L	None
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				



2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

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
Nitrite	0.73	mg/L	Feb. 28, 2022
Nitrite	0.52	mg/L	May 30, 2022
Alkalinity	311 & 311	mg/L	Sept. 12, 2022
Alkalinity	306 & 309	mg/L	Jan. 31, 2022

ANNUAL REPORT

Drinking-Water System Number:	260005138
Drinking-Water System Name:	King City
Drinking-Water System Owner:	Township of King
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2022 to December 31, 2022

<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;"> <p>Township of King 2585 King Road King City, ON L7B 1A1 www.king.ca</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 80px;" type="text"/></p> <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: <input style="width: 80px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
---	---

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
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 [X] NA

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

[X] Public access/notice via the web



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

- 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: Standard of Care, Report to Council

Describe your Drinking-Water System

Distribution System Class 1
 Receives treated water from York Region Water System (Lake-Based Water).
 Secondary disinfection is provided by chloramination and has been measured as combined chlorine residual (chloramines).

List all water treatment chemicals used over this reporting period

Refer to York Region Annual Report for the King City Water Supply System.

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

Jan. 31, 2022 - WM leak repair on Warren Rd. - \$6,500.00
June 20, 2022 – WM leak repair on Banner Lane - \$3,300.00

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. 23, 2022	Total Coliform	Present	Present/ Absent	Re-sampled up-stream, down-stream and at adverse location.	Aug. 23, 2022



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

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 Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	208	Absent	Absent - Present	100	0-30

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 #)	<i>NOTE: For continuous monitors use 8760 as the number of samples.</i>
Chloramine	386	0.95 – 2.14 (Combined)	
Fluoride (If the DWS provides fluoridation)	N/A		

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. Township values reflect the latest sample.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
Schedule C of License 121-103 Issue 3.	NDMA	Quarterly	0.0014	µg/L

Summary of Inorganic parameters tested during this reporting period or the most recent sample results. Township values reflect the latest sample. Refer to York Region’s Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				



Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite	Nov. 21, 2022	<0.05	mg/L	None
Nitrate	Nov. 21, 2022	<0.50	mg/L	None

*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 - mg/L (min#) – (max #)	Number of Exceedances
Plumbing		N/A	
Distribution (Alkalinity)	6	90.00 – 92.70	None

Note that all four of the Township Drinking Water Systems are subject to the “exemption” protocols

Summary of Organic parameters sampled during this reporting period or the most recent sample results. Township values an average of the sample results for the Report year. Refer to York Region’s Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				



1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acid (HAA)	Feb.28/22 May.30/22 Sept.06/22 Nov.21/22	8.3	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest annual average)	Feb.28/22 May.30/22 Sept.06/22 Nov.21/22	18.20	µg/L	None
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				



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

Trifluralin				
Vinyl Chloride				

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