2020 Annual Drinking Water Report

For:

Hamilton Drive Drinking Water System Rockwood Drinking Water System

-And-

Gazer Mooney Subdivision Distribution System

Prepared by:



February 28, 2021

I. Introduction

Purpose

The purpose of this report is to provide information to stakeholders and to satisfy the regulatory requirements of the Safe Drinking Water Act (SDWA) including the Drinking Water Quality Management Standard (DWQMS), and regulatory reporting required under Ontario Regulation (O. Reg.) 170/03 (Section 11 and Schedule 22). The report is a compilation of information that helps to demonstrate the ongoing provision of safe, consistent supply of high-quality drinking water to customers located within Rockwood, the Hamlets of Hamilton Drive and Prominade Park (Gazer Mooney Subdivision).

Scope

This Annual & Summary Water Services Report includes information for Rockwood, Hamilton Drive and the Gazer Mooney Subdivision Distribution System for the period of Jan.1 to Dec. 31, 2020

This report satisfies the requirements of both the Safe Drinking Water Act (SDWA) and Ontario Regulation 170/03:

- Section 11, Annual Reports which includes:
 - a brief description of the drinking water systems;
 - a list of water treatment chemicals used;
 - a summary of the most recent water test results required under O. Reg. 170/03 or an approval, Municipal Drinking Water Licence (MDWL) or order;
 - a summary of adverse test results and other issues reported to the Ministry including corrective actions taken;
 - a description of major expenses incurred to install, repair or replace required equipment;
 - the locations where this report is available for inspection.

And;

- Schedule 22, Summary Report which includes:
 - list the requirements of the Safe Drinking Water Act, the regulations, the system's
 approval, Drinking Water Works Permit (DWWP), Municipal Drinking Water Licence
 (MDWL), and any orders applicable to the system that were not met at any time during
 the period covered by the report;
 - for each requirement that was not met, the duration of the failure and the measures that were taken to correct the failure;
 - 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; and

• a comparison of this information to the rated capacity and flow rates approved in the system's approval, DWWP and/or MDWL.

A copy of this report is available for viewing at the Township of Guelph/Eramosa, 8348 Wellington Rd. 124, Rockwood and Online at www.get.on.ca

As per the Accessibility for Ontarians with Disabilities Act (AODA), this document is available in an alternate format by e-mailing the Township Clerk jspies@get.on.ca or by calling 519-856-9596

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1.0 Systems Overview

1.1 Rockwood Drinking Water System

The Rockwood (RWD) Water Supply System is a Class I Water Treatment Subsystem and a Class II Water Distribution Subsystem consisting of four municipal groundwater wells, a booster pumping station/standpipe and distribution system. Wells #1 and #2 are located at the Station Street Pumphouse and supply water directly to Zone 1 distribution system. Well #3 at the Bernardi Pumphouse and Well #4 Milne Pumphouse supplies water to Zone 1 of the distribution system and to the in-distribution standpipe. When the well pumps are running, they deliver water to meet the demand in Zone 1 of the distribution system and any excess water produced is directed to the standpipe and stored there. The water level in the standpipe maintains pressure in Zone 1. A Supervisory Control and Data Acquisition / Programmable Logic Controller (SCADA/PLC) system monitors and controls the operation of the Station Street well pumps and the Bernardi and Milne high lift pumps (HLPs) based on the water level in the standpipe.

The booster pumping station draws water from the standpipe and pumps to Zone 2 of the distribution system. The station uses variable frequency drive booster pumps that allow each pump to provide a range of flow rates depending on the system demand. The booster pumps are controlled by the SCADA/PLC to maintain constant pressures in this zone. When the demand for water in Zone 2 rises, the system immediately senses the associated drop in pressure and calls the pump(s) to ramp up to meet the demand. Likewise, when the demand falls, the system senses the associated rise in pressure and calls the pumps to ramp down. At least one pump must run at all times to ensure pressures are maintained in Zone 2. Any excess pressure sensed at the booster pumping station is re-circulated back into the standpipe.

Station Street Pumphouse primary disinfection is achieved using a UV disinfection unit. Secondary disinfection is provided by the addition of sodium hypochlorite solution. The UV disinfection unit and the chemical feed pump that injects sodium hypochlorite solution are activated whenever a well pump is running.

Bernardi (Well 3) and Milne (Well 4) Pumphouse(s) primary disinfections are achieved by the addition of sodium hypochlorite and provision of chlorine contact time in a grade-level reservoir. Sodium hypochlorite is injected after the flow control valve and prior to the water meter. Chlorine residual concentrations are maintained in the water leaving the pumphouse, providing secondary disinfection. The facility has duty and standby chemical feed pumps for chlorine dosing. The chemical pump is energized when well pumps are activated.

Milne pumphouse primary disinfection is achieved by the addition of sodium hypochlorite and provision of chlorine contact time in a below grade reservoir where contact time is provided for

primary disinfection. A high lift pump draws water from the reservoir and pumps to the distribution system as well as the in-distribution standpipe. Chlorine residual concentrations are maintained in the distributed water to provide secondary disinfection.

1.2 Hamilton Drive Drinking Water System

The Hamilton Drive Water Supply System is a Class II Water Distribution and Supply Subsystem located in the Township of Guelph/Eramosa. The system services the Hamilton Drive Hamlet bounded by Victoria Road to the east, Conservation Road to the north, Highway 6 to the west and the Speed River to the south. The Hamilton Drive (HD) system obtains its entire water supply from two groundwater wells (Huntington and Cross Creek) each with its own Pumphouse and grade-level reservoir.

The raw water from each well is chlorinated to protect against microbial contaminants prior to discharge into the reservoir. The raw water is disinfected with a sodium hypochlorite solution (chlorine) for primary and secondary disinfection requirements. The water level in the reservoir starts and stops the well pumps.

The Huntington and Cross Creek Pumphouses supply treated water directly to the distribution system and to the in-distribution standpipe. As the water level in the standpipe drops, the system calls the pumps at the Huntington or Cross Creek Pumphouse to start pumping water into the distribution system. The system alternates successive pump starts between the Huntington and Cross Creek facilities. When the water demand exceeds the capacity being supplied by the Pumphouse, the supply is supplemented with water from the standpipe. When the demand is less than the amount being supplied from the Pumphouse, the excess flow is used to replenish the depleted standpipe reserves.

Water pressures are maintained throughout the distribution system by the water level in the standpipe. This system is a demand/storage system; once the standpipe is full, the high lift pumps shut down until the water level drops in the tower and the pumps are required again.

1.3 Gazer Mooney Subdivision Distribution System

The Gazer Mooney Subdivision Distribution System is a Class 1 Distribution Subsystem serving the Promenade Park Hamlet located in the Township of Guelph/Eramosa. It has approximately 72 metered water service connections, 1.5 kilometers of underground watermains, six fire hydrants and an approximate population of 216 residents.

All of the water for the Gazer Mooney Subdivision Distribution System is supplied from the Guelph Drinking Water System. All water is treated to provincial standards in the Guelph Drinking Water

System and no further treatment chemicals are added to the Gazer Mooney Subdivision Distribution System.

The system is operated by the City of Guelph Water Services by a legal agreement that was last signed by representatives of the City of Guelph and the Township of Guelph/Eramosa on March 1, 2020. The terms of the agreement apply until February 29, 2024, with an automatic renewal extended to February 28, 2029.

2.0 Summary Water Services Report

a) Incidents of Regulatory Non-Compliance

This section describes all incidents of non-compliance (excluding those defined as "Adverse Water Quality Incidents" (AWQI) reported in Section b) of this report). AWQI's are required to be reported to the Ministry of the Environment and Climate Change (MECP) with respect to the following Acts and related regulations: Ontario Water Resources Act (OWRA), Safe Drinking Water Act (SDWA), the Environmental Protection Act (EPA), and the Municipal Drinking Water Licences (MDWL) and Drinking Water Works Permits (DWWP).

As the Operating Authority for both Rockwood and Hamilton Drive Drinking Water Systems Guelph/Eramosa is annually inspected by the Ministry of the Environment, Conservation and Parks (MECP) for compliance with regulatory requirements. The 2020-2020 MECP Inspection is still ongoing therefore results are not yet available for this report. Once the inspections are complete this report will be amended noting the outcome of the findings for the reporting period.

Gazer Mooney Subdivision Distribution System

The 2020-2020 MECP Inspection is still ongoing. When results of that inspection are obtained by Water Services, Guelph/Eramosa will be updated and will share results in an amendment to this report.

b) Adverse Water Quality Incidents

This section describes all "Adverse Water Quality Incidents" (AWQI). This term refers to any unusual test result from treated water that does not meet a provincial water quality standard, or situation where disinfection of the water may be compromised. An adverse water quality incident indicates that on at least one occasion, a water quality standard was not met.

The process of water quality sampling and testing can result in false positive results for contaminants; these results can be caused by contaminated sampling containers and equipment, sampling technique, sample handling and transportation, and sample analysis. In almost all cases, mandatory

follow-up sampling and analysis confirms that contaminants are not present in the water provided to customers.

Rockwood & Hamilton Drive Drinking Water Systems (Jan. 01 to Dec. 31, 2020)

Table 1: Summary of Rockwood and Hamilton Drive Water System Adverse Water Quality Incidents

Incident Date	AWQI#	Location	Parameter / Unit of measure	Corrective Action
There were	e no incider		oliance associated with the Rockwo	ood and Hamilton Drive

Gazer Mooney Subdivision Distribution System (Jan. 01 to Dec 31, 2020)

Table 2: Summary of Gazer Mooney Subdivision Distribution System Adverse Water Quality Incidents

Incident Date	AWQI#	Location	Parameter / Unit of measure	Corrective Action
There we	re no adver	se water qua	ity incidents in the 2020	Gazer Mooney Subdivision Distribution System in).

c) Deviations from Critical Control Point (CCP) Limits and Response Actions

This section describes any deviation from essential steps or points in the drinking water system at which control can be applied to prevent or eliminate a drinking water hazard or to reduce it to an acceptable level. These essential steps or points in the system are known as critical control points (CCP). The CCPs are used to identify control measures that are in place to address hazards and hazardous events. Critical Control Limits (CCLs) are self-imposed limits and are typically more stringent than Ministry of Environment Conservation and Parks Drinking Water Standards or Municipal Drinking Water licence requirements.

There were no critical control limit deviations over the period of this report.

d) The Effectiveness of the Risk Assessment Process

A risk assessment must be conducted for all municipal residential drinking water systems, as part of the operational plans for those systems. These operational plans form the basis upon which third party auditors assess conformance to the Drinking Water Quality Management Standard.

This section confirms the occurrence of reviews and re-assessments of the risk assessment process to determine the effectiveness of the process in identifying and appropriately assessing the risk of hazardous events and hazards, and in identifying the appropriate control measures, critical control points (CCPs) and related critical control limits (CCLs).

In June 2020, Guelph/Eramosa Water Staff conducted our 36-month re-assessment of risks associated with our Municipal Drinking Water Systems. In consideration of physical distancing measures due to Covid 19, water department staff independently reviewed the currency of information and validity of assumptions used in the risk assessment. Recommended edits were shared, peer reviewed and updated accordingly.

There are no changes to source water risks as reported by the Wellington Source Water Protection Official. However, future technical rule changes related to salt will require a re-review once they are posted to the Environmental Registry of Ontario. This has been added to "Action Items" a tracking mechanism to ensure items are considered and if necessary, addressed in a timely manner.

The updated risk assessment outcomes were provided at a Management Review Meeting on September 30, 2020. For water security reasons, the results of the Risk Assessment are not made available to the public but are made available to Drinking Water System Owners (Council).

Emergency and Standard Operating Procedures (SOPs) were considered during the 2020 risk assessment process. Staff considered the operational procedure relationship to the associated risk and the applicability to emergency or nonemergency processes.

No new risk assessment processes were added however a number of processes were re-considered as non-emergency and were moved to our standard procedure binder or are being considered as part of our facility Operations and Maintenance Manuals.

e) Internal and Third-Party Audit Results

This section describes any of the audit outcomes identified to date that require follow-up actions.

Internal auditing and third-party auditing are performed to fulfill the mandatory requirements of the Drinking Water Quality Management Standard (DWQMS). The internal audit is completed using trained auditors. The purpose of audits is to evaluate the level of conformance to the DWQMS. Audits identify both conformance and non-conformance with the Standard as well as opportunities for improvement.

2020 Internal Audit

Acclaims Environmental Inc. was retained to conduct this years' internal audit of the Guelph/Eramosa Township's quality management system (QMS) on August 18-20, 2020 to determine whether it conforms to the requirements of the Drinking Water Quality Management Standard (DWQMS 2.0); and to assess whether the QMS is effectively implemented.

The review period focused on the period between June 28, 2020 and August 20, 2020.

No nonconformities were identified during the audit. Various opportunities for improvement (OFI) noted during the internal audit were discussed at the internal audit closing meeting and are tracked as "action

items" to be addressed throughout the year. Guelph/Eramosa Township staff strive to address action items by the next scheduled internal audit.

2020 External Audit

Third party audit off-site system audit was performed on November 2nd, 2020 by NSF International Inc. Accreditation to the Drinking Water Quality Management Standard Version 2.0 was maintained.

The audit results are summarized as follows; zero major non-conformities, one minor non-conformity and one opportunity for improvement.

The corrective action finding was related to Measurement and Recording Equipment Calibration & Maintenance (QMS 17). An instance was identified where our process to calibrate online analyzers are not fully effective. Appropriate corrective action was implemented and approved by the auditor. The corrective action will be verified for effectiveness by the auditor at the next audit in the fall of 2021.

The auditor noted an opportunity for improvement in the delivery of chemicals. It is suggested we consider obtaining Certificates of Analysis (C of A) with chemical deliveries to verify lot numbers. This will ensure we receive optimal supply ahead of chemical expiry dates.

This opportunity for improvement will be followed-up on by the auditor at the next audit in Fall of 2021.

f) Results of Emergency Response Testing

Emergency Response testing, training and review of potential emergencies are conducted regularly as part of the Drinking Water Quality Management System to ensure that Water Department and related staff maintains a reasonable readiness to deal with emergencies and abnormal events.

This year COVID-19 emergency has required all of us to act quickly and respond to challenges none of us could ever have imagined. GET water services along with Corporate and County wide Emergency Management remains diligent and is monitoring and updating procedures to ensure the health and safety of all staff and visitors required to work during the pandemic.

Abnormal event - December 24th Watermain break. During the event, immediate actions were taken by staff to contain the situation and prevent any further complications. Following the event, a debriefing session was held. Corrective actions (such as improving procedures, training etc.) were discussed and implemented to help improve overall emergency preparedness.

g) Operational Performance and Statistics

This section describes the various pieces of information that are used to gauge the performance of the Drinking Water System, including reasoning for changes or observations.

A 100 % rating for microbiological quality indicates that the treatment process effectively removed pathogens at all times. Chemical water quality test results indicate that all water quality meet with the provincial and federal standards for safe drinking water with the exception of Sodium levels which remain outside of the provincial standard.

Assessment of Flow Rates and Quantities of Water Supplied

The following five (5) tables list the quantities and flow rates of the water supplied during the reporting period covered by this report (Jan. 01 to Dec. 31, 2020) including monthly average and maximum daily flows and a comparison to the rated capacity and flow rates specified in the system approval.

Table 3: Summary of Raw Water Flows – Rockwood Well # 1 Station St. (TW# 1-67)

Station St. Well TW# 1- 67 (Rated Capacity 1,964 m³/day) (Rated Daily Peak 1,360 L/min)

MONTH	Avg. Daily Volume m ³	% Of Approved Volume	MAX Daily Volume m ^{3/} day	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
JANUARY	321.05	16%	582.99	30%	1211.90	89%
FEBRUARY	258.74	13%	573.28	29%	1233.88	90%
MARCH	290.31	15%	1075.96	55%	1219.23	89%
APRIL	307.09	16%	1081.69	55%	1216.12	89%
MAY	333.67	17%	1112.84	57%	1216.12	89%
JUNE	460.89	23%	1113.13	57%	1210.44	89%
JULY	508.24	26%	1268.76	65%	1203.11	88%
AUGUST	341.70	17%	1240.32	63%	1211.72	89%
SEPTEMBER	246.38	13%	797.10	41%	1213.74	89%
OCTOBER	174.25	9%	493.23	25%	1211.54	89%
NOVEMBER	161.11	8%	465.84	24%	1217.77	89%
DECEMBER	148.80	8%	651.52	33%	1239.19	91%

Table 4: Summary of Raw Water Flows – Rockwood Well # 2 Station St. (TW# 1-76)

Station St. Well TW# 1-76 (Rated Capacity 1,964 m³/day) (Rated Daily Peak 1,360 L/min)

Station St. Will IVIII I-10		(Nated Supacity 1,304 in 7day) (No		, s.s.y / 1 ts.	ated Daily I can 1,000 Emili	
	Avg. Daily	% Of	MAX Daily	% Of	Peak Flow	% Of
MONTH	Volume	Approved	Volume	Approved	Rate L/min	Approved
	m³	Volume	m ³/day	Volume		Flow Rate
	===		•			
JANUARY	284.27	14%	814.38	41%	1315.93	96%
FEBRUARY	269.13	14%	839.72	43%	1302.56	95%
MARCH	305.91	16%	983.09	50%	1252.56	92%
APRIL	258.19	13%	841.86	43%	1250.37	92%
MAY	497.30	25%	1303.09	66%	1221.98	90%
JUNE	460.08	23%	1122.37	57%	1205.68	88%
JULY	331.95	17%	1164.71	59%	1161.36	85%
AUGUST	140.43	7%	876.84	45%	1227.66	90%
SEPTEMBER	166.70	8%	459.92	23%	1222.89	90%
OCTOBER	168.32	9%	918.03	47%	1230.95	90%
NOVEMBER	198.89	10%	752.06	38%	1243.96	91%
DECEMBER	198.06	10%	1190.68	61%	1236.45	91%

Table 5: Summary of Raw Water Flows - Rockwood Well # 3 Bernardi

Bernardi Well # 3 (Rated Capacity 1,310 m³/day) (Rated Daily Peak 1100 L/min)

Demarat Well # 0		(Nated Supacity 1,510 III /day) (Nat			ca bany i cak i ioo Eminin		
MONTH	Avg. Daily Volume m ³	% Of Approved Volume	MAX Daily Volume m ³/day	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate	
JANUARY	288.84	22%	970.52	74%	840.43	76%	
FEBRUARY	383.95	29%	1101.03	84%	842.08	77%	
MARCH	334.67	26%	1002.01	76%	838.60	76%	
APRIL	433.16	33%	1105.14	84%	837.60	76%	
MAY	310.55	24%	690.94	53%	834.85	76%	
JUNE	378.91	29%	833.17	64%	835.77	76%	
JULY	622.56	48%	1043.88	80%	830.55	76%	
AUGUST	487.39	37%	873.22	67%	888.41	81%	
SEPTEMBER	422.64	32%	890.27	68%	896.83	82%	
OCTOBER	353.12	27%	667.37	51%	903.06	82%	
NOVEMBER	362.55	28%	780.73	60%	949.80	86%	
DECEMBER	310.28	24%	1043.88	80%	923.75	84%	

Table 6: Summary of Raw Water Flows - Rockwood Well # 4 Milne

Commissioned August 2020

Milne Well # 4 (Rated Capacity 1,310 m³/day) (Rated Daily Peak 1100 L/min)

MONTH	Avg. Daily Volume m³	% Of Approved Volume	MAX Daily Volume m ^{3/} day	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
AUGUST	464.75	35%	1007.51	77%	1072.20	97%
SEPTEMBER	442.91	34%	870.00	66%	1086.60	99%
OCTOBER	285.06	22%	948.91	72%	1075.80	98%
NOVEMBER	270.46	21%	621.07	47%	1051.80	96%
DECEMBER	457.38	35%	957.94	73%	1072.80	98%

Table 7: Summary of Raw Water Flows – Hamilton Drive Well # 3 Cross Creek

Cross Creek Well # 3 (Rated Capacity 812 m³/day) (Rated Daily Peak 725 L/min)

MONTH	Avg. Daily Volume m ³	% Of Approved Volume	MAX Daily Volume m ³/day	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
JANUARY	54.63	7%	236.00	29%	708.00	98%
FEBRUARY	51.43	6%	219.00	27%	708.00	98%
MARCH	61.86	8%	249.92	31%	708.00	98%
APRIL	72.82	9%	249.92	31%	714.00	98%
MAY	104.53	13%	438.00	54%	708.00	98%
JUNE	92.18	11%	290.00	36%	708.00	98%
JULY	122.60	15%	308.54	38%	705.00	97%
AUGUST	114.58	14%	284.00	35%	705.00	97%
SEPTEMBER	81.73	10%	240.00	30%	696.00	96%

MONTH	Avg. Daily Volume m ³	% Of Approved Volume	MAX Daily Volume m ³/day	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
OCTOBER	89.70	11%	286.00	35%	705.00	97%
NOVEMBER	131.03	16%	288.00	35%	696.00	96%
DECEMBER	72.78	9%	199.00	25%	726.00	100%

Table 8: Summary of Raw Water Flows – Hamilton Drive Well # 2 Huntington

Huntington Well # 2 (Rated Capacity 916 m³/day) (Rated Daily Peak 636L/min) Avg. Daily % Of MAX Daily % Of Peak Flow % Of Volume Volume Rate L/min **Approved Approved** Approved MONTH Volume m^{3/}day Volume Flow Rate m^3 8% 253.00 28% 607.36 95% 70.50 **JANUARY** 8% 27% 73.09 250.00 602.70 95% **FEBRUARY** 67.95 7% 237.00 26% 608.22 96% MARCH 7% 28% 610.10 96% 61.81 256.00 APRIL 86.83 9% 293.38 32% 607.18 95% MAY 139.91 15% 377.73 41% 610.96 96% JUNE 16% 360.00 39% 614.91 97% 144.01 JULY 11% 36% 97% 104.73 328.00 617.07 **AUGUST** 11% 98% 97.09 303.66 33% 622.09 SEPTEMBER 1.54 0% 4% 49% 40.75 314.48 **OCTOBER** 2.78 0% 72.50 8% 599.52 94% NOVEMBER 58.05 6% 234.00 26% 606.96 95% **DECEMBER**

i. Water Production vs. Water Consumption

Water Production vs. Water Consumption for 2020 shows an overall percentage loss of 8 % for Rockwood up from 2% in 2019. Hamilton Drive water loss for 2020 is 9%. Down by 21% compared to 2019. Hamilton Drive system recently repaired a long slow leak that is believed to have been the issue with such a large percentage loss in 2019.

Additional considerations for non-revenue water loss are construction, unauthorized water use, customer meter inaccuracies, distribution, and service connection piping leaks.

The soccer field at 120 Rockmosa Park was our highest consumer of water in 2020 at a rate of 21.8 m³/day based on a May to October (157 days) operational season and a total consumption of 3,425 m³.

All of the water meter replacements have been completed within the Hamilton Drive Drinking Water System.

ii. Other Operational Performance Data

The following table provides a brief description of expenses incurred within Rockwood and Hamilton Drive Drinking Water Systems

Table 9: Rockwood and Hamilton Drive 2020 Maintenance Activity

Major Maintenance Activity / Expenditure	Location
Supervisory Control and Data Acquisition (SCADA) maintenance & upgrades	RWD & HD
Distribution System Maintenance; watermain valve, hydrants, service connections	RWD & HD
Water meter replacement program	RWD & HD
Replacement of Windows and doors	HD
Generator maintenance & repairs	RWD
Roof replacement	RWD
Emergency pump (cla-valve) replacements	RWD
Pressure Transducer replacement	RWD
Probe replacements	RWD & HD
Ultra-Violet (UV) system maintenance	RWD
Watermain replacement and extension	RWD & HD

^{*} RWD: Rockwood Drinking Water System * HD: Hamilton Drive Drinking Water System

h) Raw and Treated Water Quality – Rockwood, Hamilton Drive and Gazer Mooney Drinking Water System

This section describes the water quality monitoring, both regulatory and operational, that has been completed in 2020 (Jan. 01 to Dec. 31).

Under the Safe Drinking Water Act (SDWA), Municipalities are required to monitor both the raw and treated quality of the source water supplied. This monitoring is performed for both regulatory compliance and due diligence and is expected to identify any changes within the treated water as well as in raw source waters.

Both Rockwood and Hamilton Drive Drinking Water Systems use 12 per cent Sodium Hypochlorite (that is NSF 61 certified) for both primary and secondary disinfection at all facility locations with the exception of the Rockwood Station Street location. Here ultraviolet light is also applied as part of multi-barrier primary disinfection. Additionally, NSF 60-certified sodium silicate is used for aesthetic purposes to sequester dissolved iron and manganese.

Table 10: Operational testing done under Schedule 7 of O. Reg.170/03 Rockwood

Location	Parameter	Criteria	Number of Grab Samples	Range of Results
Station St. Well 1			52	0.09 – 0.41 NTUs
Station St. Well 2		**1.0	52	0.11 – 0.43 NTUs
Milne Well 4	Turbidity		20	0.19 – 0.27 NTUs
Bernardi Well 3		n/a	52	0.10 - 0.49 NTUs
Station St. Treated			8760	0.34 – 2.95 mg/L
Milne Treated	Free Chlorine	Alarm set	8760	0.70 – 2.90 mg/L
Bernardi Treated	Residual	points	8760	0.70 – 2.90 mg/L
Operational Distribution		*0.05 - 4.0	207	0.39 -1.72 mg/L

^{**} MDWL= Municipal Drinking Water Licence requirement

Table 11: Operational testing done under Schedule 7 of O. Reg.170/03 Hamilton Drive

Location	Parameter	Criteria	Number of Grab Samples	Range of Results
Huntington Well 2	Tl. : .124	1-	45	0.08 - 0.48 NTUs
Cross Creek Well 3	Turbidity	n/a	44	0.12 - 0.35 NTUs
Huntington Treated	Free Chlorine	Alarm set	8760	0.70 - 2.60 mg/L
Cross Creek Treated	Residual	points	8760	0.70 – 2.60 mg/L
Operational Distribution	Residual	*0.05 - 4.0	159	0.42-1.85 mg/L

NTUs = Nephelometric Turbidity Units

*ODWQS=Ontario Municipal Drinking Water Quality Standards

Table 12 summarizes raw sampling and test results required by the Guelph/Eramosa's Municipal Drinking Water Licence (MDWL) for two provisional ground water wells located in Rockwood for the period of January 1 to December 31, 2020. The MDWL requires a F-specific coliphage test to be conducted on a quarterly sampling schedule.

Table 12: summarizes raw sampling and test results required by the Guelph/Eramosa's

Location	Parameter	Criteria	Number of Grab Samples	Range of Results
Station St Well 1	F. Specific	one positive detection	4	0-0
Station St Well 2	Coliphage	in any running year	4	0-0

Table 13: O. Reg. 170/03 Schedule 10 - Rockwood / Hamilton Drive Microbiological Testing

(Jan. 01 to Dec. 31, 2020)

Drinking Water System	Parameter	# of Samples	E. coli (min –max)	Total Coliform (min – max)	HPC (min – max)
gg				Units = CFU/mL	_
	Raw	179	0-0	0-0	N/A
Rockwood	Treated	127	0-0	0-0	0-72
	Distribution	208	0-0	0-0	0-13
	Raw	100	0-0	0-2	N/A
Hamilton Drive	Treated	100	0-0	0-0	0-4
	Distribution	160	0-0	0-0	0-13

Table 14: O. Reg. 170/03 Schedule 13-2 13-4 Chemical testing results - Rockwood Well Supply

Rockwood Well Supply –Station Street Pumphouse Organic/Inorganic parameters for reporting period January 01 to December 31, 2020.

LEGEND		Pi	oject Name	ROCKWOOD WELL SUPPLY
Bold & Red = Exceedance		Sample location	STATION ST. PUMPHOUSE	
*DL = Laboratory Detection Limit			ample Date	20-Jan-20
* MAC = Maximum Acceptable Concentration as per Reg 170 & Reg 169 DW - MAC ND = No Detection				TREATED WATER
Parameter Name	Units	*MAC	*DL	Result
Mercury (Hg)	mg/L	0.001	0.0001	ND
Antimony (Sb)	ug/L	6	0.5	ND
Arsenic (As)	ug/L	10	1	ND
Barium (Ba)	ug/L	1000	2	90
Boron (B)	ug/L	5000	10	27
Cadmium (Cd)	ug/L	5	0.1	ND
Chromium (Cr)	ug/L	50	5	ND
Lead (Pb)	ug/L	10	0.5	ND
Selenium (Se)	ug/L	50	2	ND

LECEND		D	raiget Nama		
LEGEND		PI	roject Name	ROCKWOOD WELL SUPPLY	
Bold & Red = Exceedance		Sample location		STATION ST. PUMPHOUSE	
*DL = Laboratory Detection Limit			ample Date	20-Jan-20	
* MAC = Maximum Acceptable Concentration	n as per	ND N D		TREATED WATER	
Reg 170 & Reg 169 DW - MAC	l les ide	ND = No D			
Parameter Name	Units	*MAC	* DL	Result 140000	
Sodium (Na)	ug/L	20000	0.1	140000	
Uranium (U)	ug/L	20			
2,3,4,6-Tetrachlorophenol	ug/L	100	0.5	ND	
2,4,6-Trichlorophenol	ug/L	5	0.5	ND	
2,4-D	ug/L	100	1	ND	
2,4-Dichlorophenol	ug/L	900	0.25	ND	
Alachlor	ug/L	5	0.5	ND	
Atrazine	ug/L	-	0.5	ND	
Des-ethyl atrazine	ug/L	-	0.5	ND	
Atrazine + Desethyl-atrazine	ug/L	5	1	ND	
Bromoxynil	ug/L	5	0.5	ND	
Carbaryl	ug/L	90	5	ND	
Carbofuran	ug/L	90	5	ND	
Chlorpyrifos (Dursban)	ug/L	90	1	ND	
Diazinon	ug/L	20	1	ND	
Dicamba	ug/L	120	1	ND	
Diclofop-methyl	ug/L	9	0.9	ND	
Dimethoate	ug/L	20	2.5	ND	
Malathion	ug/L	190	5	ND	
MCPA	ug/L	100	10	ND	
Metolachlor	ug/L	50	0.5	ND	
Metribuzin (Sencor)	ug/L	80	5	ND	
Pentachlorophenol	ug/L	60	0.5	ND	
Phorate	ug/L	2	0.5	ND	
Picloram	ug/L	190	5	ND	
Prometryne	ug/L	1	0.25	ND	
Simazine	ug/L	10	1	ND	
Terbufos	ug/L	1	0.5	ND	
Triallate	ug/L	230	1	ND	
Trifluralin	ug/L	45	1	ND	
Benzo(a)pyrene	ug/L	0.01	0.005	ND	
1,1-Dichloroethylene	ug/L	14	0.1	ND	
1,2-Dichlorobenzene	ug/L	200	0.2	ND	
1,2-Dichloroethane	ug/L	5	0.2	ND	
1,4-Dichlorobenzene	ug/L	5	0.2	ND	
Benzene	ug/L	1	0.1	ND	
				Page 15 of 29	

LECEND		D	aia at Niama	DOCIANOOD WELL CLIPPLY
LEGEND		Project Name		ROCKWOOD WELL SUPPLY
Bold & Red = Exceedance			Sample location	STATION ST. PUMPHOUSE
*DL = Laboratory Detection Limit	S	ample Date	20-Jan-20	
* MAC = Maximum Acceptable Concentratio Reg 170 & Reg 169 DW - MAC	ND = No D	etection	TREATED WATER	
Parameter Name	Units	*MAC	*DL	Result
Bromodichloromethane	ug/L	-	0.1	0.13
Bromoform	ug/L	-	0.2	ND
Carbon Tetrachloride	ug/L	2	0.1	ND
Chlorobenzene	ug/L	80	0.1	ND
Chloroform	ug/L	-	0.1	0.24
Dibromochloromethane	ug/L	-	0.2	ND
Methylene Chloride(Dichloromethane)	ug/L	50	0.5	ND
Ethylbenzene	ug/L	140	0.1	ND
Tetrachloroethylene	ug/L	10	0.1	ND
Toluene	ug/L	60	0.2	ND
Trichloroethylene	ug/L	5	0.1	0.15
Vinyl Chloride	ug/L	1	0.2	ND
o-Xylene	ug/L	-	0.1	ND
p+m-Xylene	ug/L	-	0.1	ND
Total Trihalomethanes	ug/L	-	0.2	0.37
Glyphosate	ug/L	280	10	ND
Diquat	ug/L	70	7	ND
Diuron	ug/L	150	10	ND
Guthion (Azinphos-methyl)	ug/L	20	2	ND
Paraquat	ug/L	10	1	ND

Table 15 summarizes treated and distribution samples taken at the Rockwood and Hamilton Drive Drinking Water Systems for the period of Jan. 01 to Dec. 31, 2020.

Table 15: O. Reg. 170/03 Schedule 13-6, 13-7 Rockwood and Hamilton Drive quarterly results

(Based on 4 sample results)

Location Type	Test Parameter	MAC mg/L	Rockwood mg/L	Hamilton Drive mg/L
Distribution	Trihalomethanes	0.100	0.017	0.008
(expressed as running average)	Haloacetic Acids	80.0	0.005	0.005
	Nitrate (NO3)		<0.010 - 0.010	<0.10 - 0.10
Treated	Nitrite (NO2)	10.0	<0.010 - <0.010	<0.010 - <0.010
	NO3 +NO2 (as nitrogen)		<0.10 - <0.10	<0.10 - <0.10

MAC: Maximum Acceptable Concentration

Summary results for schedule 15.1 of Ontario Regulation 170/03.

Rockwood and Hamilton Drive Drinking Water Systems are required to sample from the distribution systems as follows:

- Sample for pH and alkalinity every "winter" and "summer" period each year.
- Sample for lead once every three years, both "winter" and "summer" periods.

2020 was a Lead sampling year, therefore is included with pH and alkalinity for the period of Jan. 1 to Dec. 31, 2020

Table 16: O. Reg. 170/03 Schedule 15.1 Rockwood/Hamilton Testing Summary 2020

Location	Location Type	Number of Samples	Lead Range (mg/L)	pH Range	Alkalinity Range (mg/L)
Rockwood	Distribution	8	< 0.0005	7.20 - 7.50	250 - 320
Hamilton Drive	Distribution	4	< 0.0007	7.30 - 7.59	210 - 220

Treated Water Quality Review- Gazer Mooney Subdivision Distribution System

This section describes the regulatory water quality monitoring that has been collected in the Gazer Mooney Subdivision Distribution System in 2020 (Jan. 01 to Dec. 31, 2020). For regulatory sampling schedules that do not occur in 2020 related to the Gazer Mooney System, the most recent historical data is listed.

The following section summarizes daily Distribution free chlorine residual test results required by O. Reg. 170/03 for the period of Jan. 01 to Dec. 31, 2020 are summarized in table 16. There was no instance of an adverse result in 2020 between Jan. 01 and Dec. 31:

Table 17: O. Reg. 170/03 Schedule 7-2, Gazer Mooney - Distribution Manual Free Chlorine Residual Summary

Parameter	Number of Grab Samples	Range of Results (min # - max #)
Free Chlorine Residual	107	0.79 - 1.08 mg/L

Table 17 summarizes bacteriological sampling and test results required by O. Reg. 170/03 Schedule 10 for the period of Jan. 01 to Dec. 31, 2020. There was no instance of an exceedance for a Regulatory microbiological parameter in 2020 between Jan. 01 and Dec. 31:

Table 18: O. Reg. 170/03 Schedule 10-2, Gazer Mooney Microbiological Testing Summary

Drinking Water	Parameter	# of Samples	E. coli (min –max)	Total Coliform (min – max)	# of HPC Samples	HPC (min – max)
System			Units = Cfu/100 mL			
Gazer Mooney Subdivision	Distribution only	52	0-0	0-0	52	0-1

Table 19: O. Reg. 170/03 Schedule 13-7, Gazer Mooney - Quarterly Sampling Results Summary

Test Parameter	Units	MAC	Range of Results (based on 4 sample results)	
expressed as annual running average			(min # - max #)	
Trihalomethanes	mg/L	0.100	0.014 - 0.020	
Haloacetic Acids	mg/L	0.08	<0.005 - <0.005	

MAC: Maximum acceptable concentration

In 2020, Gazer Mooney Subdivision Distribution System was sampled and analyzed for the Schedule 13-8 and 13-9 Fluoride parameter as per O. Reg. 170/03. In 2020, Fluoride (naturally present and not added as part of the treatment process) was detected; the analytical result was under the maximum allowable concentration (MAC).

Table 20: O. Reg. 170/03 Schedule 13.8 and 13-9 Gazer Mooney "Five Year" Sampling Results 2020

Parameter	Aesthetic objective (AO)	Maximum acceptable concentration (MAC)	Total samples	Min (mg/L)	Max (mg/L)
Sodium	200	20	2	24	26
Fluoride	2.4	1.5	1	0.17	0.17

i) Follow up on Action Items from previous management reviews

Management review was held on September 30, 2020 and covers the period between October 15, 2020 to August 30th, 2020. Below is a summary of action items discussed.

Action Item

 By-law Number 22/2000 DISCHARGES TO STORM SEWERS 3.(1) prevents discharge of pool water into our storm sewers. A recent inquiry prompted discussion with Top Management and our SWP Official related to higher sodium levels. Possible link to saltwater pool discharging. Most residents are not familiar with our discharging section of this older bylaw.

Decision: Given the minimal resources for enforcing the bylaw the building department plans to reference this bylaw within their "pool enclosure guide" to help provide not only awareness but direction for residents building pools.

- Review and possible update to the bylaw, specifically, saltwater pools.
- Document upcoming process changes to the SCADA and the implementation of "e.RIS" SCADA program by operational staff.

Decision: Suggest an SOP or work instruction should be created to promote consistency in the process and compliance with the MDWL.

j) Status of Management action items identified between reviews

2019 OFI – Element 21 Continual Improvement; recommend regular meetings to update the "Action Items" listing and keep the responsibilities for pending improvements at the forefront of our minds.

Water staff are committed to improving the drinking water system. Given the year we have had is was suggested we send out the action listing to all staff to obtain their input individually then discuss as a group within a zoom meeting. Action Items may then be closed or assigned to a responsible person for completion.

Source Water Protection Plan Reporting

For reporting purposes, Guelph / Eramosa Township is subject to one Source Protection Plan (based on watershed or Conservation Authority boundaries): Grand River Plan. In 2020, all Source Protection Plans were in effect. Please see Appendix A for the full 2020 Risk Management Official and Municipal Annual Report.

k) Expected Future Changes That Could Affect the DWS or the QMS

Please view 3.0 Legal and other Requirements update from January 1 to December 31, 2020 that could affect the Drinking Water System and/or the Quality Management System.

Licensing Renewal 2020 – The renewal application for all of the Guelph/Eramosa Drinking Water Systems Municipal Drinking Water Licences were submitted in July of 2020. New licencing and permits expire on December 18, 2025.

Milne Well # 4 Pumphouse was brought online in August of 2020 and is included as part of the Municipal Drinking Water Licencing (MDWL). However, due to delays during the construction and commissioning facility updated drawings were provided to the Ministry at a later date.

As part of the MDWL renewal, the updated Financial Plan was submitted to Council for approval in July 2020. The Operational Plan was endorsed by Council in September 2019.

Now that Milne Well Pump House is completed, updates to the Operational Plan must be presented to Council with all of the applicable changes. Re-endorsement is required for both Guelph/Eramosa and Gazer Mooney Subdivision.

PTTWs - Cross Creek - scheduled for (May 31, 2021) with Huntington renewal due in (May 31, 2023). Submission for renewal has been processed including request for amalgamation of both Cross Creek and Huntington wells.

I) Consumer Feedback

Water pressure issues and high consumption complaints are the most frequent complaints of 2020. All were determined to be related to private issues.

m) The Resources Needed to Maintain the QMS

Resources required to support the implementation of the continual improvement process under the DWQMS involve the dedication of staff to support the Drinking Water System. Efforts are ongoing to address the needs and priorities within the Drinking Water System by dedicating time and resources for the review and development of required procedures and documents.

n) Infrastructure Review

In order to satisfy the current and pending requirements of the Drinking Water Quality Management Standard, the Director of Public Works and Operations Manager conduct an annual review of its water treatment, pumping, storage and watermain infrastructure. Taken into consideration is long term forecasting of major infrastructure renewal. The program is communicated verbally identifying needs on an on-going basis (e.g. maintenance inspections) or periodic (e.g. site-specific risk assessments). Based on the information collected, needs are assessed, prioritized and is communicated to the owner through the annual budget process.

o) Operational Plan currency, content and updates

The DWQMS Operational Plan is in process of adding our new "Milne" well 4 facility. Council's last endorsement the Operational Plan was in September 2019. Re-endorsement is planned for 2021. Revisions and updates made to standard operating procedures and supporting documentation have been completed or are in the process of review as required and in a timely manner, updated. Controlled hard copies were distributed.

p) Staff suggestions

- 1 Consider adding the following to the emergency contact list: site addresses and phone numbers; hydro meter numbers (and who supplies power to each); IP addresses.
- 2 Have two staff create an emergency scenario and have the remainder participate in the emergency. The next time they can switch. This hopefully will generate a positive mindset for participation and perhaps a little competition.

3.0 Legal and other Requirements update

Date - 2020	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
Jan. 2	Environ-mental Registry of Ontario (ERO)	A decision was made to proceed with the <u>amendments</u> to the Wells Regulation. The amending regulation was filed with the Registrar of Regulations on December 19, 2020 and came into force on January 1, 2020.	No action required
Jan. 2	ERO	The Ministry of the Environment, Conservation and Parks (MECP) is delivering their Made-in-Ontario Environment Plan commitment to hold polluters accountable by moving forward with the use of administrative monetary penalties. The changes will introduce, expand and/or clarify the government's authority to issue penalties for environmental contraventions under the Nutrient Management Act, Ontario Water Resources Act, Pesticides Act and the Safe Drinking Water Act.	No action required
Jan. 18	CBC	Residents in Shannon Quebec are eligible for compensation for a water contamination that some say gave them deadly cancer. Trichloroethylene (TCE) was discovered to have leached into the drinking water supply in 1997.	No action required
Feb. 11	Ontario Water Works Association (OWWA)	A newly created Municipal Water and Wastewater Section within the Environmental Permissions Branch is dedicated to serving the permissions needs in the area of drinking water, wastewater and stormwater.	No action required
Feb. 12	ERO	The Ministry of Natural Resources and Forestry has posted proposed amendments to Ontario Regulation 244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act.	No action required

Date - 2020	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
Mar 4	ERO	James Dick Construction Ltd has applied for a Class <u>"A" licence Pit & Quarry Below Water</u> to excavate aggregate from a pit and quarry 39.4 hectares in size. This application is for the establishment of a new pit and quarry. The annual tonnage condition applied for is 700,000 tonnes per calendar year.	No action required
Mar. 24	E-laws	The Emergency Management and Civil Protection Act was updated today to include O. Reg. 75/20, which speaks to Drinking Water Systems and Sewage Works during the Provincial Emergency declaration.	New regulation shared with W/WW team.
Mar. 29	Ministry of Labour	The Ministry of Labour has released a Guideline for Construction site health and safety during COVID-19.	Shared with DPW
Apr. 7	Canadian Gazette	Health Canada, in collaboration with the Federal-Provincial-Territorial Committee on Drinking Water, is proposing to withdraw the existing Guidelines for Canadian Drinking Water Quality (GCDWQ) for 18 chemical substances, including 14 pesticides, as it was determined that GCDWQ are no longer required since these contaminants are unlikely to be found in Canadian drinking water at levels that may pose a risk to human health.	No action required
Apr. 23	ERO	Species-specific policies (government response statements) have been finalized outlining actions to protect and recover eight Species at Risk in Ontario.	No action required
May 29	ERO	The province is proposing government response statements that outline actions the government is taking and supports to protect and recover nine Species at Risk in Ontario.	No action required

Date - 2020	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
June 1	Health Canada	The following documents have been updated: Final guideline for Canadian drinking water quality for barium Final guideline for Canadian drinking water quality for chloramines Final guideline for Canadian drinking water quality for Escherichia coli	No action required
June 5	ERO	Approval to further protect sources of drinking water in the Grand River Source Protection Area The amended assessment report and source protection plan for the Grand River Source Protection area has been approved in accordance with section 34 of the Clean Water Act, 2006. The amendments update the water quality protection zones around 28 municipal residential drinking water systems and include some new policies and revisions to previous policies to further protect drinking water sources.	Monitoring ERO for updates.
June 18	MECP Email	Updating Ontario's Water Quantity Management Framework The Ontario government is seeking public input on its water quantity management proposal. The proposal aims to protect the long-term sustainability of surface water and groundwater and ensure these important resources are responsibly managed and safeguarded now and into the future, as committed in the province's Made-in-Ontario Environment Plan. The proposal would also give municipalities a greater say in allowing companies to withdraw groundwater in their communities for bottled water.	Monitoring ERO for updates.

Date - 2020	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
June 19	ERO	Discussion paper on modernizing hazardous waste reporting in Ontario Proposed changes to Regulation 347, the Registration Guidance Manual for Generators of Liquid Industrial and Hazardous Waste and recommendations on a new regulation under the Resource Recovery and Circular Economy Act.	No action required
June 20	Canada Gazette	Final guideline for Canadian drinking water quality for total coliforms Pursuant to subsection 55(3) of the Canadian Environmental Protection Act, 1999, the Minister of Health hereby gives notice of a final guideline for Canadian drinking water quality for total coliforms. The technical document for this guideline is available on the Water Quality website. This document underwent a public consultation period of 60 days in 2020 and was updated to take into consideration the comments received.	No action required
June 26	Canada Gazette	Guidance on the use of Enterococci as an Indicator in Canadian Drinking Water Supplies Pursuant to subsection 55(3) of the Canadian Environmental Protection Act, 1999, the Minister of Health hereby gives notice of the Final Drinking Water Guidance on Enterococci as an Indicator in Canadian Drinking Water Supplies.	No action required
July 8	ERO	Proposed Environmental Assessment Act amendments in the COVID 19 – Economic Recovery Act These amendments will enable next steps in modernizing Ontario's environmental assessment program, helping to ensure strong environmental oversight while getting critical infrastructure projects off the ground quicker.	Notice sent to the DPW, Manager of W/WW Dept.

Date - 2020	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting		Action and Status Update
July 17	ERO	Quality Guidelines as Objectives: <u>Cadmium</u> <u>Arsenic</u> <u>Nitrate Ion</u> <u>Sulfolane</u>	opt the following Canadian Water a Provincial Water Quality Methoprene Mercury or Methylmercury Diisopropanolamine	No action required
		guidance document C Water Distribution Sys	orrosion Control in Drinking stems.	
Aug. 11	ERO	Proposed amendments to the Director's Technical Rules made under section 107 of the Clean Water Act, 2006 We are proposing updates to the technical rules for assessing source water protection vulnerability and risk under the Clean Water Act to ensure that the quality of Ontario's drinking water continues to be protected and that source protection efforts are supported by current science.		RMO monitoring
Aug. 14	Ontario News	Ontario Launches First-Ever Climate Change Impact Assessment Toronto — The Ontario government has selected a consulting team led by the Climate Risk Institute to conduct the province's first-ever multi-sector climate change impact assessment. The study will use the best science and information to better understand where and how climate change is likely to affect communities, critical infrastructure, economies and the natural environment, while helping to strengthen the province's resilience to the impacts of climate change.		No action required

Date - 2020	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
Aug. 18	ERO	Environmental assessment modernization: amendment proposals for Class Environmental Assessments We are modernizing the environmental assessment program by working with proponents of Class Environmental Assessments (Class EA) to propose changes that would ensure strong environmental oversight, while aligning assessment requirements with environmental impact, reducing duplication, and increasing efficiency of the Class EA process.	
Sept. 30	ERO	Proposal to extend the current moratorium on water bottling permits We are extending the current moratorium on new or increased permits to take groundwater to produce bottled water for up to 6 months, to April 1, 2021. This extension gives us time to thoroughly consider the feedback we received and further engage on how we can implement our proposed enhancements to Ontario's water taking program	Monitoring ERO for updates.
Oct. 13	Ontario News	Worker Struck by Exploding Cap, \$70,000 Fine for City of London	No action required
Oct. 24	Canada Gazette	Pursuant to subsection 55(3) of the Canadian Environmental Protection Act, 1999, the Minister of Health hereby gives notice of proposed guidelines for dicamba in drinking water. A maximum acceptable concentration (MAC) of 0.11 mg/L (110 µg/L) is proposed for dicamba in drinking water.	Monitoring ERO for updates.

Date - 2020	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
Nov. 5	ERO	We are amending the Conservation Authorities Act to improve transparency and consistency in conservation authority operations, strengthen municipal and provincial oversight and streamline conservation authority roles in permitting and land use planning. https://ero.ontario.ca/notice/019-2646	Monitoring ERO for updates.
Nov. 13	Ontario News	Water Treatment Operator fined \$30,000 for Safe Drinking Water Act Violation Drinking Water System Owner fined \$9,000 for Safe Drinking Water Act Violations	No action required
Dec. 8	ERO	Proposed Implementation of Updates to Ontario's Water Quantity Management Framework We're seeking input on draft guidance to help manage water taking in areas where water quantity is a concern and where there are competing demands for water. We are also proposing to revoke the interim guidance once updates to Ontario's water taking program are in place, aligned with the end of the bottled water moratorium on April 1, 2021.	Monitoring ERO for updates.
Dec. 14	MECP Email	The Ministry is proposing administrative updates to the Director's Directions – Minimum Requirements for Operational Plans. The Director's Directions govern the minimum requirements for preparation and content of operational plans that are developed for municipal residential drinking water systems.	Monitoring ERO for updates.
Dec. 16	Ontario News	Ontario announces working group to better focus Conservation Authorities. Input will lead to improved conservation and protection of the province's water, land and natural resources.	No action required

Date - 2020	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
Dec. 18	ERO	Proposal to require municipal support for new or increased bottled water takings The Ontario Government is moving forward with changes to the Ontario Water Resources Act to require water bottling companies to have the support of their local host municipality for a new or increased groundwater taking in their community.	Monitoring ERO for updates.
Dec. 21	MECP Email	The Minister of the Environment, Conservation and Parks has released their 2020 annual report on the work Ontario is doing to protect our drinking water and water resources in the province. Today, the ministry also released the Chief Drinking Water Inspector's Annual Report, which provides an overview of the ministry's progress during 2020-20 and includes in-depth information on the performance of Ontario's drinking water systems and licensed laboratories.	No action required
Dec. 21	ERO	Extending Grandfathering for Infrastructure Projects and Providing Additional Flexibility for Excess Soil Reuse The MECP has amended several regulations related to excess soil under the Environmental Protection Act, and related documents.	No action required



4.0 Appendix A Source Water Protection

Pending - March 30, 2020