



Chatham-Kent

Public Utilities Commission

2025 Annual Drinking Water Summary Report

Ridgetown Drinking Water System

Reporting Period of January 1st – December 31st, 2025



This Annual Drinking Water Summary Report is prepared in accordance with the following requirements:

Ontario Regulation 170/03 – Drinking Water Systems	
Section 11	Annual Reports
Schedule 22	Summary Reports for Municipalities

1. INTRODUCTION AND BACKGROUND

1.1. System Description

Drinking-Water System Number:	220003369
Drinking-Water System Name:	Ridgetown Drinking Water System
Drinking-Water System Owner:	PUC for the Municipality of Chatham-Kent
Drinking-Water System Category:	Large Municipal Residential
Municipal Drinking Water Licence:	027-101
Drinking Water Works Permit:	027-201
Period being reported:	January 1 – December 31, 2025

Source Water:

Ground Water	6 Non-GUDI Wells (Ground Water Under Direct Influence of Surface Water)
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Treatment:

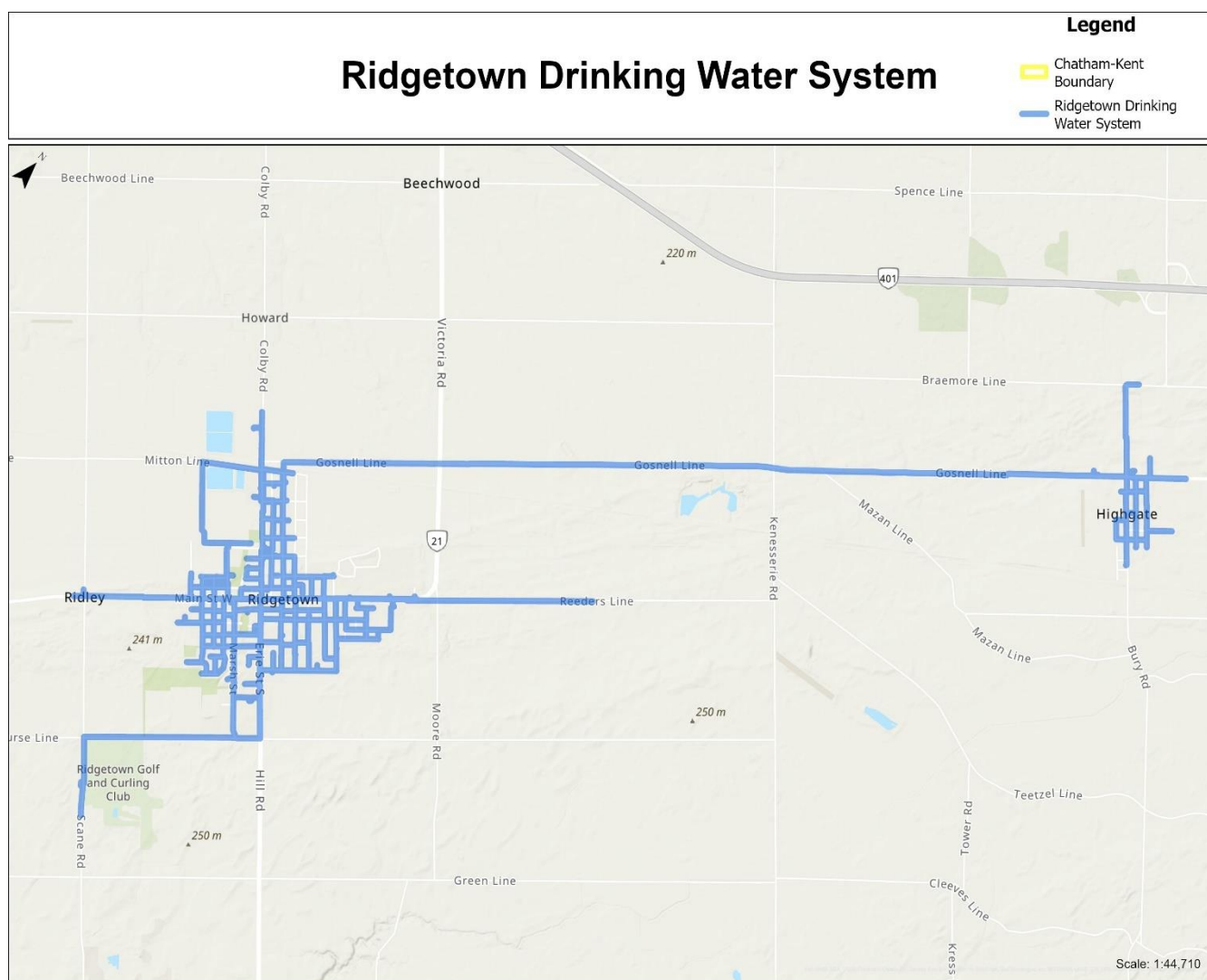
The Ridgetown Drinking Water System consists of two water treatment plants, one at 45 Erie Street North in the town of Ridgetown, and one at 19900 Scane Road, just outside of the town of Ridgetown.

Methane Stripping	Aeration
Primary Disinfection	Chlorination – Sodium Hypochlorite

Distribution:

The Ridgetown Water Distribution System consists of approximately 50 km of watermains which services the community of Ridgetown, the former Township of Howard, the former Township of Orford and the community of Highgate. Population served is approximately 4,000.

Secondary Disinfection	Chlorination – Sodium Hypochlorite
Storage	Ridgetown Elevated Tank
Storage, Pumping & Re-chlorination	Highgate Reservoir & Booster Pumping Station



1.2. List all Drinking-Water Systems (if any), which receive all their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
None	

1.3. Description and breakdown of monetary expenses incurred

Expense	Cost (\$)
Myrtle St, Cecil St, Lovers Ln, Harold St S – Watermain Relining	1,000,000
External Laboratory Analysis	21,589
Sodium Hypochlorite	11,036
Chemical Feed Pump & associated Tubing, Fittings	10,576
Scane Well #1 Building Upgrade	6,700
Scane Well # 2 Flowmeter Replacement	6,000
High Range Chlorine Colorimeter & Reagents	6,000
Flowmeter Verification / Calibration	2,900
On-line Analyzer Replacement Components	2,600
Portable pH Analyzer	2,400
Generator Annual Servicing	1,720

2. WATER QUANTITY
2.1. System Performance

According to the Municipal Drinking Water License, rated capacity is determined by the maximum daily treated volume from the treatment subsystem to the distribution system.

Rated Capacity: Maximum Daily Treated Volume m ³ /day	Maximum Daily Treated Volume m ³ /day	Maximum Daily Treated Volume vs Rated Capacity %
Erie Street 2,780	1,702	61
Scane Road 1,310	1,088	83

2.2. Total Treated Water flows from the treatment subsystem to the distribution system:

The following table outlines total monthly flow, average daily flow, and maximum daily flow supplied to the distribution system from the Erie Street & Scane Road Water Treatment Plants. Additionally, the average daily flows and maximum daily flows are compared to the rated capacity outlined in the Municipal Drinking Water License.

Erie Street:

Month	Total Monthly Flow m ³ /day	Average Daily Flow m ³ /day	% of Rated Capacity	Maximum Daily Flow m ³ /day	% of Rated Capacity
Limits			100	2,780	100
January	30,296	977	35	1,068	38
February	27,911	997	36	1,214	44
March	31,544	1,018	37	1,158	42
April	32,365	1,079	39	1,446	52
May	33,212	1,071	39	1,221	44
June	35,104	1,170	42	1,482	53
July	36,140	1,166	42	1,597	57
August	34,448	1,111	40	1,315	47
September	33,859	1,129	41	1,396	50
October	35,594	1,148	41	1,702	61
November	34,179	1,139	41	1,233	44
December	34,253	1,105	40	1,303	47
	Total Yearly Flow m³/day	Annual Average m³/day	Maximum %	Maximum m³/day	Maximum %
	398,904	1,093	42	1,702	61

Scane Road:

Month	Total Monthly Flow m ³ /day	Average Daily Flow m ³ /day	% of Rated Capacity	Maximum Daily Flow m ³ /day	% of Rated Capacity
Limits			100	1,310	100
January	14,054	453	35	539	41
February	13,088	467	36	567	43
March	16,683	538	41	837	64
April	16,278	543	41	948	72
May	16,292	526	40	599	46
June	17,444	581	44	900	69
July	21,203	684	52	1,088	83
August	16,962	547	42	649	50
September	16,499	550	42	681	52
October	18,047	582	44	986	75
November	16,241	541	41	642	49
December	17,254	557	42	656	50
	Total Yearly Flow m³/day	Annual Average m³/day	Maximum %	Maximum m³/day	Maximum %
	200,045	548	52	1,088	83

2.3. Total Treated Water flows from the treatment subsystem to the distribution system (5 years):

The following tables outline historic total monthly flows from January 2021 until the end of the reporting period.

Erie Street & Scane Road:

Month	2021 Total Monthly Flow m ³ /day	2022 Total Monthly Flow m ³ /day	2023 Total Monthly Flow m ³ /day	2024 Total Monthly Flow m ³ /day	2025 Total Monthly Flow m ³ /day
January	35,132	50,281	50,696	54,207	44,350
February	33,459	44,666	43,982	45,346	40,999
March	37,646	48,893	48,803	55,490	48,226
April	37,626	44,827	49,197	43,155	48,643
May	48,398	46,181	56,215	52,429	49,504
June	46,095	50,380	56,990	49,053	52,548
July	50,584	55,539	49,152	50,855	57,343
August	54,582	48,724	61,319	52,211	51,410
September	48,236	49,994	58,542	49,523	50,358
October	54,714	53,521	56,773	49,138	53,641
November	48,319	51,799	54,105	44,481	50,420
December	49,692	49,696	54,495	43,663	51,507
	Total Yearly Flow m³/day	Total Yearly Flow m³/day	Total Yearly Flow m³/day	Total Yearly Flow m³/day	Total Yearly Flow m³/day
	544,483	594,501	640,268	589,551	598,949

3. OPERATIONAL TESTING

3.1. Operational testing done under Schedule 7 of Regulation 170/03 during the period covered by this Annual Report:

As per Schedule 7 of Regulation 170/03, the Ridgetown Water Treatment Plant must ensure that a sample is taken at least once every month from each well that is supplying water to the system, from a location that is before raw water enters the treatment system and is tested for turbidity. Sampling and testing for free chlorine residuals must be carried out by continuous monitoring equipment where the intended contact time had been completed.

Parameter	Number of Grab Samples	Range of Results (min #) - (max #)
Turbidity (Raw Well Water)	340	0.09 – 2.95 NTU
Chlorine (Erie Point of Entry)	8760	0.43 – 3.81 mg/L
Chlorine (Scane Point of Entry)	8760	0.40 – 3.68 mg/L
Fluoride	Not Applicable	

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

4. WATER QUALITY MONITORING

4.1. Microbiological Testing done under the Schedule 10 of Regulation 170/03, during this reporting period:

As per Schedule 10 of Regulation 170/03, the Ridgetown Drinking Water System is required to take the following samples:

Raw Water:

A minimum of one raw water sample per week to be tested for *Escherichia coli* (E.coli) and total coliforms (TC).

Treated Water:

A minimum of one treated water sample is required per week to be tested for E. coli, TC, and heterotrophic plate count (HPC).

Distribution Water:

At least eight distribution samples, plus one additional distribution sample for every 1,000 people served by the system, are taken every month, with at least one of the samples being taken in each week. Each distribution sample is tested for E.coli and TC and 25% of distribution samples are tested for HPC.

	Number of Samples	Range of E. coli Results (min #) - (max #)	Range of Total Coliform Results (min #) - (max #)	Number of HPC Samples	Range of HPC Results (min #) - (max #)
Raw (Each Well)	231	0 – 0	0 – 11	0	
Treated (Erie & Scane)	104	0 – 0	0 – 0	104	< 10 – 10
Distribution	296	0 – 0	0 – 0	292	< 10 – 190

4.2. Summary of Inorganic parameters tested during this reporting period or the most recent sample results:

As per Schedule 13 of Regulation 170/03, the Ridgetown Drinking Water System is required to take a minimum of one treated water sample to be tested for the parameters outlined in Schedule 13 and 23 as reported in the table below.

Any results displayed as less than (<) are below the detection limit of the accredited third-party laboratory.

Parameter	Sample Date	Result Value Erie	Result Value Scane	MAC* Limit	Unit of Measure	Exceedance
Antimony	Jan 13	< 0.50	< 0.50	6	ug/L	No
Arsenic	Jan 13	<1.0	<1.0	10	ug/L	No
Barium	Jan 13	110	180	1000	ug/L	No
Boron	Jan 13	930	910	5000	ug/L	No
Cadmium	Jan 13	< 0.090	< 0.090	5	ug/L	No
Chromium	Jan 13	< 5.0	< 5.0	50	ug/L	No
Mercury	Jan 13	< 0.0001	< 0.0001	0.0001	mg/L	No
Selenium	Jan 13	< 2.0	< 2.0	50	ug/L	No
Sodium	Jan 13	66,000**	68,000**	20,000	ug/L	Yes
Uranium	Jan 13	< 0.10	< 0.10	20	ug/L	No
Fluoride	Jan 13	1.8**	1.8**	1.5	mg/L	Yes
Nitrite	Oct 6	< 0.010	< 0.010	1	mg/L	No
Nitrate	Oct 6	< 0.10	< 0.10	10	mg/L	No

* MAC: Maximum Acceptable Concentration

** Naturally occurring in the ground water well source

4.3. Summary of Organic parameters sampled during this reporting period or the most recent sample results:

As per Schedule 13 of Regulation 170/03, the Ridgetown Drinking Water System is required to take a minimum of one treated water sample to be tested for the parameters outlined in Schedule 24 as reported in the table below.

Any results displayed as less than (<) are below the detection limit of the accredited third-party laboratory.

Parameter	Sample Date	Result Value Erie	Result Value Scane	MAC* Limit	Unit of Measure	Exceedance
Alachlor	Jan 13	< 0.50	< 0.50	5	ug/L	No
Atrazine + N-dealkylated metabolites	Jan 13	< 1.0	< 1.0	5	ug/L	No
Azinphos-methyl	Jan 13	< 2.0	< 2.0	20	ug/L	No
Benzene	Jan 13	< 0.10	< 0.10	1	ug/L	No
Benzo(a)pyrene	Jan 13	< 0.0050	< 0.0050	0.01	ug/L	No
Bromoxynil	Jan 13	< 0.50	< 0.50	5	ug/L	No
Carbaryl	Jan 13	< 5.0	< 5.0	90	ug/L	No
Carbofuran	Jan 13	< 5.0	< 5.0	90	ug/L	No
Carbon Tetrachloride	Jan 13	< 0.10	< 0.10	2	ug/L	No
Chlorpyrifos (Dursban)	Jan 13	< 1.0	< 1.0	90	ug/L	No
Diazinon	Jan 13	< 1.0	< 1.0	20	ug/L	No
Dicamba	Jan 13	< 1.0	< 1.0	120	ug/L	No
1,2-Dichlorobenzene	Jan 13	< 0.20	< 0.20	200	ug/L	No
1,4-Dichlorobenzene	Jan 13	< 0.20	< 0.20	5	ug/L	No
1,2-Dichloroethane	Jan 13	< 0.20	< 0.20	5	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 13	< 0.10	< 0.10	14	ug/L	No
Dichloromethane	Jan 13	< 0.50	< 0.50	50	ug/L	No
2,4-Dichlorophenol	Jan 13	< 0.25	< 0.25	900	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 13	< 1.0	< 1.0	100	ug/L	No
Diclofop-methyl	Jan 13	< 0.90	< 0.90	9	ug/L	No
Dimethoate	Jan 13	< 2.5	< 2.5	20	ug/L	No
Diquat	Jan 13	< 7.0	< 7.0	70	ug/L	No
Diuron	Jan 13	< 10	< 10	150	ug/L	No
Ethylbenzene	Jan 13	< 0.10	< 0.10	140	ug/L	No
Glyphosate	Jan 13	< 10	< 10	280	ug/L	No
Malathion	Jan 13	< 5.0	< 5.0	190	ug/L	No
2 Methyl-4-chlorophenoxyacetic acid (MCPA)	Jan 13	< 10	< 10	100	ug/L	No

Metolachlor	Jan 13	< 0.50	< 0.50	50	ug/L	No
Metribuzin (Sencor)	Jan 13	< 5.0	< 5.0	80	ug/L	No
Monochlorobenzene	Jan 13	< 0.10	< 0.10	80	ug/L	No
Paraquat	Jan 13	< 1.0	< 1.0	10	ug/L	No
Pentachlorophenol	Jan 13	< 0.50	< 0.50	60	ug/L	No
Phorate	Jan 13	< 0.50	< 0.50	2	ug/L	No
Picloram	Jan 13	< 5.0	< 5.0	190	ug/L	No
Polychlorinated Biphenyls (PCB)	Jan 13	< 0.05	< 0.05	3	ug/L	No
Prometryne	Jan 13	< 0.25	< 0.25	1	ug/L	No
Simazine	Jan 13	< 1.0	< 1.0	10	ug/L	No
Terbufos	Jan 13	< 0.50	< 0.50	1	ug/L	No
Tetrachloroethylene	Jan 13	< 0.10	< 0.10	10	ug/L	No
2,3,4,6-Tetrachlorophenol	Jan 13	< 0.50	< 0.50	100	ug/L	No
Toluene	Jan 13	< 0.20	< 0.20	60	ug/L	No
Triallate	Jan 13	< 1.0	< 1.0	230	ug/L	No
Trichloroethylene	Jan 13	< 0.10	< 0.10	5	ug/L	No
2,4,6-Trichlorophenol	Jan 13	< 0.50	< 0.50	5	ug/L	No
Trifluralin	Jan 13	< 1.0	< 1.0	45	ug/L	No
Vinyl Chloride	Jan 13	< 0.20	< 0.20	1	ug/L	No
Xylenes	Jan 13	< 0.10	< 0.10	90	ug/L	No

* MAC: Maximum Acceptable Concentration

As per Schedule 13 of Regulation 170/03, the Ridgetown Drinking Water System is required to ensure that at least one distribution sample is taken in each calendar quarter, from a point in the drinking water system's distribution system, or plumbing that is connected to the drinking water system, that is likely to have an elevated potential for the formation of Trihalomethanes (THMs). The results of THM sampling shall be monitored and expressed as a running annual average of quarterly results.

Parameter	Sample Date	Result Value	RAA Value	MAC* Limit	Unit of Measure	Exceedance
THMs	Jan 13	45.0	52.6	100	ug/L	No
	Apr 14	38.2	50.7			No
	Jul 14	56.0	50.2			No
	Oct 06	58.7	49.5			No

* MAC: Maximum Acceptable Concentration

As per Schedule 13 of Regulation 170/03, the Ridgetown Drinking Water System is required to ensure that at least one distribution sample is taken in each calendar quarter, from a point in the drinking water system's distribution system or plumbing that is connected to the drinking water system, that is likely to have an elevated potential for the formation of haloacetic acids (HAAs). The results of HAA sampling shall be monitored and expressed as a running annual average of the quarterly results.

Parameter	Sample Date	Result Value	RAA Value	MAC* Limit	Unit of Measure	Exceedance
HAAs	Jan 13	5.9	7.0	80	ug/L	No
	Apr 14	5.0	5.4			No
	Jul 14	5.0	5.4			No
	Oct 06	5.0	5.2			No

* MAC: Maximum Acceptable Concentration

4.4. Summary of Lead analysis during this reporting period:

As per Schedule 15.1 of Regulation 170/03, the Ridgetown Drinking Water System qualifies for reduced lead sampling. A minimum of 4 distribution samples must be taken and tested for lead during each of the following periods in the relevant 12-month period:

1. The period from December 15 to April 15.
2. The period from June 15 to October 15.

Any results displayed as less than (<) are below the detection limit of the accredited third-party laboratory.

Location Type	Number of Samples	Range of Lead Results (min #) - (max #)	MAC* Limit	Unit of Measure	Number of Exceedances / Adverses
Residential	0		10	ug/L	
Non-Residential	0				
Distribution	8	< 0.50 – < 0.50			0

* MAC: Maximum Acceptable Concentration

4.5. List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

As per Schedule 13-5 of Regulation 170/03, if a test result for any of the inorganic or organic parameters listed in Schedule 23/24 exceeds half of the standard prescribed for the parameter in Schedule 2 to the Ontario Drinking Water Quality Standards, the frequency of sampling and testing for that parameter under that section shall be increased so that at least one water sample is taken and tested every three months.

Parameter	Sample Date	Result Value Erie	Result Value Scane	Half MAC* Limit	Unit of Measure	Exceedance
<i>None during the reporting period</i>						

* MAC: Maximum Acceptable Concentration

4.6. Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Parameter	Sample Date	Result Value Erie	Result Value Scane	MAC* Limit	Unit of Measure	Exceedance
<i>None during the reporting period</i>						

* MAC: Maximum Acceptable Concentration

4.7. Summary of additional voluntary sampling and testing during the reporting period or the most recent sample results.

Parameter	Sample Date	Colby Well #1	Colby Well #2	Hitch Well #2	Haris Well #3A	Scane Well #1	Scane Well #2	Unit of Measure
Nitrite – Raw Nitrate – Raw	Jan 13	< 0.010 < 0.10	-	< 0.010 < 0.10	< 0.010 < 0.10	< 0.010 < 0.10	< 0.010 < 0.10	mg/L
Nitrite – Raw Nitrate – Raw	Apr 14	< 0.010 < 0.10	-	< 0.010 < 0.10	< 0.010 < 0.10	< 0.010 < 0.10	< 0.010 < 0.10	
Nitrite – Raw Nitrate – Raw	Jul 14	< 0.010 < 0.10	< 0.010 < 0.10	-	-	< 0.010 < 0.10	< 0.010 < 0.10	
Nitrite – Raw Nitrate – Raw	Oct 6	< 0.010 < 0.10	< 0.010 < 0.10	-	-	< 0.010 < 0.10	< 0.010 < 0.10	

5. ADVERSE WATER QUALITY INCIDENTS

An adverse drinking water condition is identified by a test result or an observed event that that water may not be safe for consumption and/or detrimental to public health.

Adverse water quality indicators may be as a result of adverse test results that exceed the Ontario Drinking Water Quality Standards. Additional indicators of adverse water quality may be, but not limited to, inadequate filtration or disinfection, low distribution system pressure, evident or suspected contamination of the water system.

Depending on the severity of the adverse water quality indicator, the local Medical Officer of Health / Public Health Unit may issue a water advisory, such as a Boil Water Advisory or Do Not Drink Advisory.

Adverse water quality incidents require timely reporting to the local Medical Officer of Health / Public Health Unit and the Spills Action Centre (SAC) of the Ministry of the Environment, Conservation and Parks (MECP).

Adverse Water Quality Incidents	
<i>None during the reporting period</i>	
AWQI #:	Type:
Parameter:	
Result(s):	Limit:
Date Issued:	Date Resolved:
Details of Adverse:	
Actions Taken & Results Achieved:	

Boil Water Advisories			
AWQI #: 170429		Type: Operational	
Parameter: Distribution System Pressure			
Result(s): < 20 psi		Objective: 20 psi	
Date Issued: 2025 Oct 17		Date Rescinded: 2025 Oct 20	
Details of Boil Water Advisory: Pressure loss in a section of a temporary distribution system in the community of Ridgetown.			
The area impacted by the pressure loss was being serviced by a temporary watermain, due to construction involving a watermain relining project. The temporary watermain was on the surface and supplied from the existing underground watermain with backflow preventors.			
A watermain break on the temporary watermain was experienced, resulting in a pressure loss in the are supplied by the temporary watermain. The watermain repair was disinfected and completed, however due to the pressure loss and potential for introduction of contaminants, a boil water advisory was issued by the Chatham-Kent Public Health Unit.			
A free chlorine residual of 1.46 mg/L was observed after the repair were completed.			
Affected Area: Sections of Harold St S to Jane St to Lovers Lane, Lovers Lane to Harold St S to Cecil St, Cecil St from Lovers Lane to Myrtle, Myrtle from Cecil to Church in Ridgetown. Approximately 70 residences were supplied by the temporary watermain.			
Actions Taken & Results Achieved: Distribution system flushing, sampling and testing.			
Sample & Test Results:			
Oct 17	Free CL2 mg/L	TC cfu / 100 mL	EC cfu / 100 mL
Location 9 Myrtle St, Ridgetown	0.88	0	0
Mar 11	Free CL2 mg/L	TC cfu / 100 mL	EC cfu / 100 mL
Location 9 Myrtle St, Ridgetown	1.14	0	0

6. NON-COMPLIANCES

Failure to meet the standards outlined in provincial regulations, such as those set by the Safe Drinking Water Act, 2002, may result in non-compliance of such regulatory requirements. Additionally, failure to meet the requirements and conditions of the Municipal Drinking Water Licence and Drinking Water Works Permit may also result in a non-compliance.

Depending on the severity of the non-compliance, a non-compliance may affect the drinking water systems inspection rating, investigated with potential for charges/fines and provincial officers' orders issued all at the discretion of the Ministry of the Environment, Conservation and Parks (MECP).

Non-Compliances
<i>None during the reporting period</i>
Type:
Parameter:
Date(s) / Period:
Finding(s):
Criteria / Limit:
Details:
Action(s) Taken:

7. NON-CONFORMANCES

Not undertaking or consideration of drinking water system best management practices may result in a non-conformance of such practices. Best management practices are not mandatory or a regulatory requirement for implementation, but rather a recommendation by the Ministry of the Environment, Conservation and Parks (MECP), to improve the drinking water system or quality management system.

Non-Conformances
<i>None during the reporting period</i>
Type:
Parameter:
Date(s) / Period:
Finding(s):
Recommendation / Objective:
Action(s) Taken:

8. SPILL OF A POLLUTANT / DISCHARGE OF A CONTAMINANT

Spills of a pollutant or discharges of a contaminant to the natural environment which has or may have an adverse effect on or impairment of the natural environment. The requirements monitoring, reporting, remediation of spills and containment discharges are set out in the Environmental Protection Act, R.S.O. 1990 and the Municipal Drinking Water Licence.

Spills of a pollutant or discharges of a contaminant require timely reporting to the local Medical Officer of Health / Public Health Unit and the Spills Action Centre (SAC) of the Ministry of the Environment, Conservation and Parks (MECP).

Spills of a Pollutant / Discharge or a Contaminant	
Incident #:	Spill / Contaminant Material:
Beginning Date:	Beginning Time:
End Date:	End Time:
Duration:	Volume:
Source of Spill:	
Location of Spill:	
Cause of Spill:	
Action(s) Taken:	