Havelock Drinking Water System

Annual Water Report

Reporting period of January 1, 2024 – December 31, 2024

Prepared For: The Township of Havelock-Belmont-Methuen
Prepared By: Ontario Clean Water Agency
Agence Ontarienne Des Eaux

This report has been prepared to satisfy the annual reporting requirements of the Provincial Regulations and Guidelines established by the Ministry of the Environment in the Province of Ontario including the section 11 and Schedule 22 reports identified in O.Reg 170/03, Drinking Water Systems Regulation and the Permit to Take Water Reports identified in O.Reg 387/04, Water Taking and Transfer Regulation.

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Report Availability

Population Served:	< 10,000
Website where the annual report can be viewed by the public:	www.hbmtwp.ca
Alternate location were annual report will be available for inspection and is free of charge:	Municipal Office
How are system users notified that the annual report is available and is free of charge?	Public access/notice via Township Website and Utility Bill
Number of Designated Facilities served:	None
Has a copy of this report been provided to all Designated Facilities?	N/A
Number of Interested Parties reported to:	N/A
Has a copy of this report been provided to all Interested Parties?	N/A
The following Drinking-Water Systems receive drinking water from this system:	N/A
Has a copy of this report been provided to connected owners?	N/A

Compliance Report Card

Drinking Water System Number:	210000595
System Owner:	The Corporation of the Township of Havelock-Belmont-Methuen
Operating Authority:	Ontario Clean Water Agency
Drinking Water System Category:	Large Municipal Residential
Reporting Period:	January 1, 2024 – December 31, 2024

Event Summary	# of Events	Date	Details
Ministry of Environment Inspections	1	October 08, 2024	Announced- Inspection completed on November 07th, 2024 with 100% final inspection rating.
Ministry of Labour Inspections	0		
DWQMS Audits	2	April 22, 2024 May 10,2024	Systems Audit Re-Accreditation Audit
AWQI's	0		
Non-Compliance	0		
Community Complaints	1	12-Aug-2024	OCWA visited a consumer's tap upon complaint of water quality-taste. Visual inspection and chlorine residual was completed. Quality appeared okay at time of visit.
Spills	0		

Quality Control Measures

The Township of Havelock-Belmont-Methuen facilities are part of OCWA's operational Trent Valley Hub. The facilities are supported by hub, regional and corporate resources. Operational Services are delivered by OCWA staff who live and work in the surrounding area.

OCWA operates facilities in compliance with applicable regulations. The facility has comprehensive manuals detailing operations, maintenance, instrumentation, and emergency procedures. All procedures are treated as active documents, with annual reviews.

OCWA has additional "Value Added" and operational support services that the Township of Havelock-Belmont-Methuen benefits from including:

- Access to a network of operational compliance and support experts at the regional and corporate level, as well as affiliated programs that include the following:
    - Quality & Environmental Management System, Occupational Health & Safety System and an internal compliance audit system.
    - PDM (WISKI) facility operating information repository, which consolidates field data, online instrumentation, and electronic receipt of lab test results for reporting, tracking and analysis.
    - Work Management System (WMS) and Maximo track and reports maintenance activities, and creates predictive and preventative reports.
    - Wonderware wide-area SCADA system allows for process optimization and data logging, process trending, remote alarming and optimization of staff time.
- Client reporting which includes operational data, equipment inventory, financial statements, maintenance work orders, and capital status reports
- Site-Specific Contingency Plans and Standard Operating Procedures
- Use of accredited laboratories
- Access to a network of operational compliance and support experts at the hub, region and corporate level
- Additional support in response to unusual circumstances, and extra support in an emergency.
- Use of sampling schedules for external laboratory sampling

System Process Description

Raw Source

Raw water source for the Havelock Drinking Water System are from three groundwater wells; Well 1, Well 3 and Well 4.

Treatment

The Havelock Drinking Water System is operated with two treatment subsystems; Well #3 which is an independent subsystem and Wells 1&4 which are operated together. Well #3 is under the direct influence of surface water system. Treatment consists of chemically assisted duel media (GAC/sand) gravity filtration plus ultraviolet and sodium hypochlorite disinfection. Well #1 and Well #4 utilize ultraviolet disinfection and sodium hypochlorite for treatment. This water system has continuous, alarmed monitoring for treated water free chlorine residual, filter effluent turbidity and distribution free chlorine residual.

Treatment Chemicals used during the reporting year:

Chemical Name	Use	Supplier
SternPac	Primary Coagulation	Kemira
Magnafloc	Coagulant aid	BASF Canada
Granular Activated Carbon	Filter Media	Calgon Carbon / Continental Carbon Group
Sodium Hypochlorite – 12%	Disinfection	Jutzi & Brentag

Summary of Non-Compliance

Adverse Water Quality Incidents

Date	AWQI #	Cause			Corrective Action Taken
		Parameter	Result	Exceedance of	
N/A					

Non-Compliance

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
N/A				

Non-Compliance Identified in a Ministry Inspection:

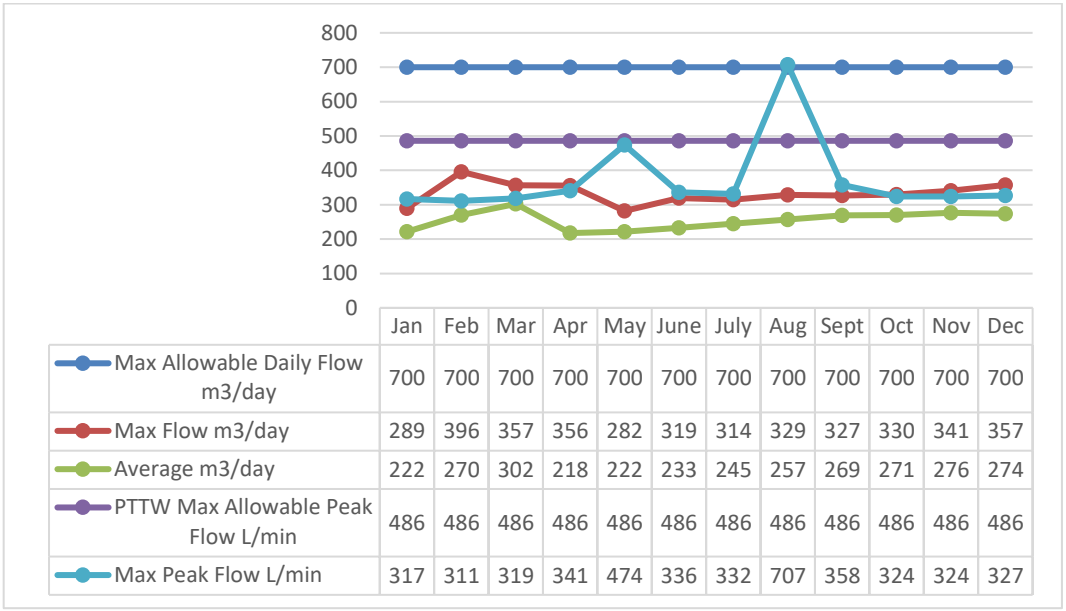
Ministry of Environment Inspection Rating: N/A

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
N/A				

Raw Water Flows

The Raw Water flows are regulated under the Permit to Take Water.

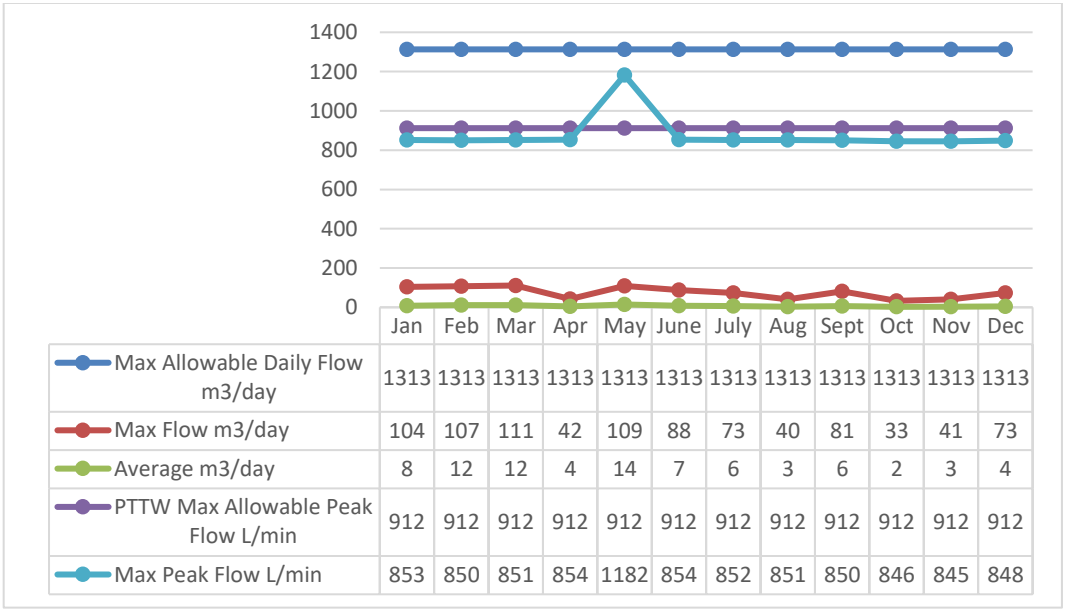
Raw Water Volume Taken- Raw Well 1:



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Max Allowable Daily Flow m3/day	700	700	700	700	700	700	700	700	700	700	700	700
Max Flow m3/day	289	396	357	356	282	319	314	329	327	330	341	357
Average m3/day	222	270	302	218	222	233	245	257	269	271	276	274
PTTW Max Allowable Peak Flow L/min	486	486	486	486	486	486	486	486	486	486	486	486
Max Peak Flow L/min	317	311	319	341	474	336	332	707	358	324	324	327

The Peak Flow rate was increased in August 2024 during maintenance.

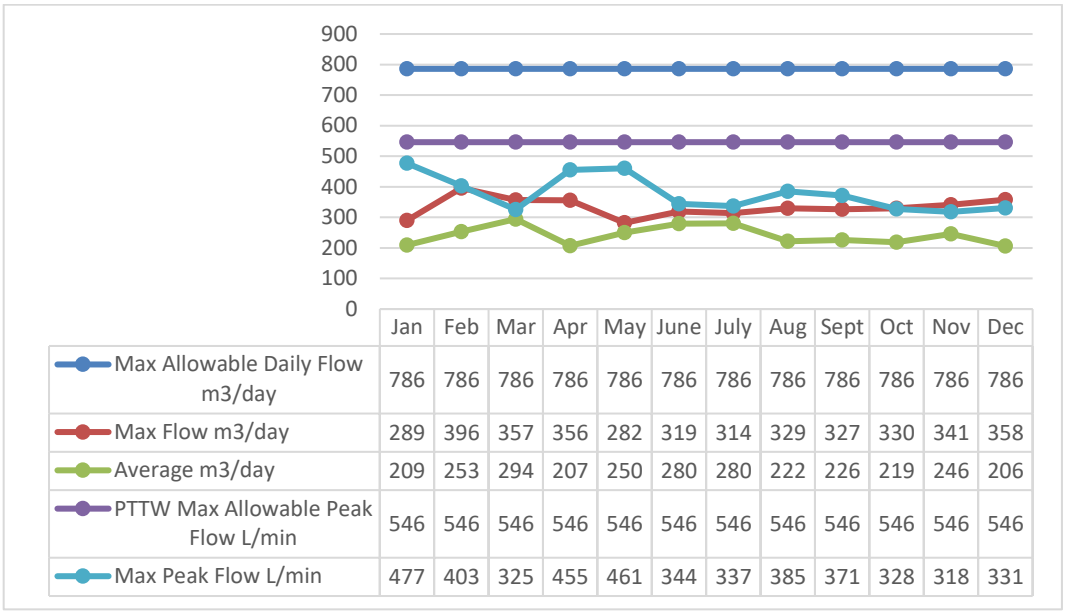
Raw Water Daily Rate of Taking Raw Well 3:



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Max Allowable Daily Flow m3/day	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313
Max Flow m3/day	104	107	111	42	109	88	73	40	81	33	41	73
Average m3/day	8	12	12	4	14	7	6	3	6	2	3	4
PTTW Max Allowable Peak Flow L/min	912	912	912	912	912	912	912	912	912	912	912	912
Max Peak Flow L/min	853	850	851	854	1182	854	852	851	850	846	845	848

The Peak Flow rate was increased in May 2024 during scheduled flow meter calibrations.

Raw Water Daily Rate of Taking Raw Well 4:

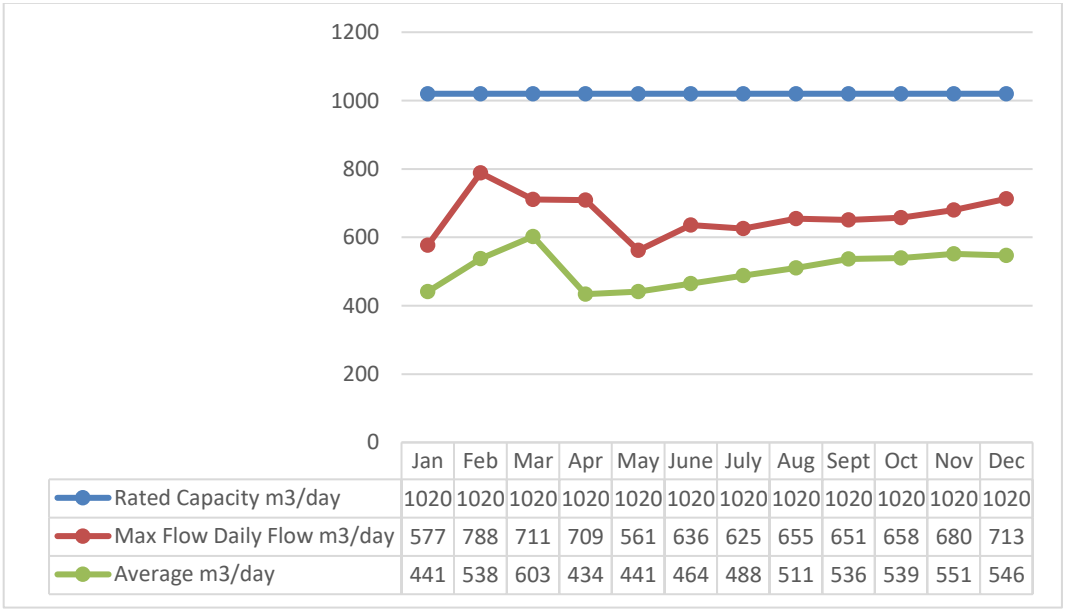


	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Max Allowable Daily Flow m3/day	786	786	786	786	786	786	786	786	786	786	786	786
Max Flow m3/day	289	396	357	356	282	319	314	329	327	330	341	358
Average m3/day	209	253	294	207	250	280	280	222	226	219	246	206
PTTW Max Allowable Peak Flow L/min	546	546	546	546	546	546	546	546	546	546	546	546
Max Peak Flow L/min	477	403	325	455	461	344	337	385	371	328	318	331

Treated Water Flows

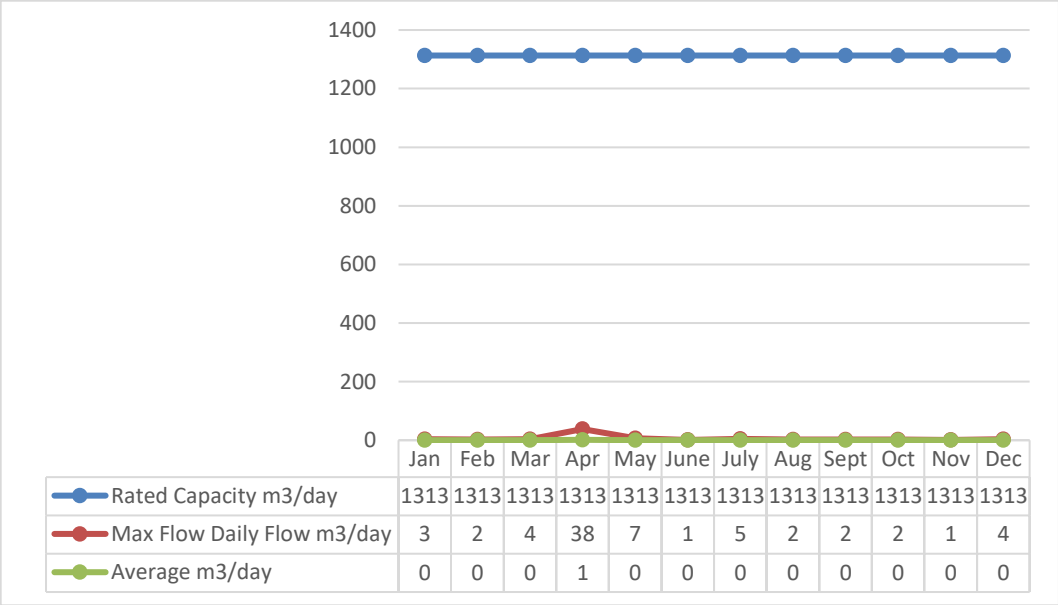
The Treated Water flows are regulated under the Municipal Drinking Water License. The Havelock Drinking Water System has a rated capacity of 1020m3/day for Well 1&4 and 1313m^3/day for Well 3. Additional flow data can be found under the Water Taking and Transfer Data section.

Treated Water Well 1 & 4:



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Rated Capacity m3/day	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020
Max Flow Daily Flow m3/day	577	788	711	709	561	636	625	655	651	658	680	713
Average m3/day	441	538	603	434	441	464	488	511	536	539	551	546

Treated Water Well 3:



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Rated Capacity m3/day	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313
Max Flow Daily Flow m3/day	3	2	4	38	7	1	5	2	2	2	1	4
Average m3/day	0	0	0	1	0	0	0	0	0	0	0	0

Regulatory Sample Results Summary

- RW1 = Raw Water Well 1
- RW3 = Raw Water Well 3
- RW4 = Raw Water Well 4
- TW3 = Treated Water Well 3
- TWc = Treated Water Well 1&4 Combined
- DW = Distribution Water

Microbiological Testing

Location	Number of Samples	E. Coli Results (min) - (max)	Total Coliform Results (min) – (max)	Number of HPC Samples	HPC Results (min) - (max)
Raw, Well 1	53	0 – 1	0 – 28	~	~
Raw, Well 3	53	0 - 20	0 – 420	~	~
Raw, Well 4	53	0 – 2	0 – 4	~	~
Treated, Well 3	53	0 – 0	0 - 0	53	0 – 12
Treated – Well 1 & 4 Combined	53	0 - 0	0 - 0	53	0 – 6
Distribution - DW	159	0 - 0	0 - 0	159	0 – 12

On-Line

Parameter	Range of Results (min # - max #)
Filter #1 Effluent Turbidity, Well 3	**0.02 – 5.00 NTU***
Filter #2 Effluent Turbidity, Well 3	**0.00 – 4.58 NTU***
Treated Water Free Chlorine, Well 3	**0.86 – 3.40 mg/L**
Turbidity, Well 1	**0.0 – 2.99 NTU***
Turbidity, Well 4	**0.0 – 1.86 NTU***
Treated Water Free Chlorine, TWc	**0.46 – 5.01 mg/L**
Distribution Free Chlorine	0.**37 – 4.25 mg/L**
Treated Water Fluoride	**Fluoride is not added at this facility**

***** Instrument spikes and dips recorded by on-line instrumentation were a result of air bubbles and various maintenance and calibration activities. Power interruptions may also cause an instrument reading to drop to zero. All events are reviewed for compliance with O. Reg. 170/03 and if warranted, are reported to the Ministry of Environment as Adverse Water Quality Incidents.

In-House

Parameter	# of grab samples taken	Range of Results (min # - max #)
Raw Water Turbidity, Well 1	12	0.09 – 0.23 NTU
Raw Water Turbidity, Well 4	12	0.10 – 0.21 NTU
Treated Water Free Chlorine, Well 1&4	58	1.56 – 2.2 mg/L
Treated Water Free Chlorine, Well 3	65	1.32– 2.7 mg/L
Distribution Free Chlorine	171	0.54 – 2.14 mg/L

Laboratory

Parameter	# of grab samples taken	Range of Results (min # - max #)
Treated Water Fluoride	Fluoride is not used at this facility	
Raw Water Iron, Well 3	12	3,530.0 – 27,100.0 ug/L
Raw Water Manganese, Well 3	12	350.0 – 850.0 ug/L
Treated Water Iron, Well 3	12	30.0 – 350.0 ug/L
Treated Water Manganese, Well 3	12	0.00 – 10.0 ug/L

Additional Legislated Samples

Legal Document	Date of Issuance	Parameter	# of grab samples taken	Annual Average Results	Annual Average Limit
Municipal Licence	June 25, 2021	Suspended Solids	12	2.17 mg/L	25 mg/L
Municipal Licence	June 25, 2021	Total Chlorine Residual	12	0.009 mg/L	0.02 mg/L

Inorganic Parameters

- MAC = Maximum Allowable Concentration as per O. Reg 169/03
- BDL = Below the laboratory detection level
- Note: Fluoride and Sodium are only required to be tested every 60 months.

Treated Water	Sample Date	Result Value	MAC	Exceedances	
				MAC	1/2 MAC
Antimony: Sb (ug/L) - TW3	04-Mar-2024	< MDL 0.6	6	No	No
Antimony: Sb (ug/L) - TWc	04-Mar-2024	< MDL 0.6	6	No	No
Arsenic: As (ug/L) - TW3	04-Mar-2024	0.3	10	No	No
Arsenic: As (ug/L) - TWc	04-Mar-2024	< MDL 0.2	10	No	No
Barium: Ba (ug/L) - TW3	04-Mar-2024	52	1000	No	No
Barium: Ba (ug/L) - TWc	04-Mar-2024	123	1000	No	No
Boron: B (ug/L) - TW3	04-Mar-2024	10	5000	No	No
Boron: B (ug/L) - TWc	04-Mar-2024	34	5000	No	No
Cadmium: Cd (ug/L) - TW3	04-Mar-2024	0.008	5	No	No
Cadmium: Cd (ug/L) - TWc	04-Mar-2024	0.003	5	No	No
Chromium: Cr (ug/L) - TW3	04-Mar-2024	1.58	50	No	No
Chromium: Cr (ug/L) - TWc	04-Mar-2024	0.41	50	No	No
Mercury: Hg (ug/L) - TW3	04-Mar-2024	< MDL 0.01	1	No	No
Mercury: Hg (ug/L) - TWc	04-Mar-2024	< MDL 0.01	1	No	No
Selenium: Se (ug/L) - TW3	04-Mar-2024	0.09	50	No	No
Selenium: Se (ug/L) - TWc	04-Mar-2024	0.72	50	No	No
Uranium: U (ug/L) - TW3	04-Mar-2024	0.061	20	No	No
Uranium: U (ug/L) - TWc	04-Mar-2024	0.202	20	No	No
Fluoride (mg/L) - TW3	4-Jul-2023	< MDL 0.06	1.5	No	No
Fluoride (mg/L) - TWc	4-Jul-2023	0.07	1.5	No	No
Nitrate : (mg/L) - TW3	15-Jan-24	0.06	10	No	No
Nitrate : (mg/L) - TW3	8-Apr-24	2.08	10	No	No
Nitrate : (mg/L) - TW3	2-Jul-24	0.034	10	No	No
Nitrate : (mg/L) - TW3	15-Oct-24	0.034	10	No	No
Nitrate : (mg/L) - TWc	15-Jan-24	1.72	10	No	No
Nitrate : (mg/L) - TWc	8-Apr-24	1.98	10	No	No
Nitrate : (mg/L) - TWc	2-Jul-24	2.23	10	No	No
Nitrate : (mg/L) - TWc	15-Oct-24	2.47	10	No	No

Nitrite : (mg/L) - TW3	15-Jan-24	< MDL 0.003	1	No	No
Nitrite : (mg/L) - TW3	8-Apr-2024	< MDL 0.003	1	No	No
Nitrite : (mg/L) - TW3	2-Jul-2024	< MDL 0.003	1	No	No
Nitrite : (mg/L) - TW3	15-Oct-2024	< MDL 0.003	1	No	No
Nitrite : (mg/L) - TWc	15-Jan-2024	< MDL 0.003	1	No	No
Nitrite : (mg/L) - TWc	8-Apr-2024	< MDL 0.003	1	No	No
Nitrite : (mg/L) - TWc	2-Jul-2024	< MDL 0.003	1	No	No
Nitrite : (mg/L) - TWc	15-Oct-2024	< MDL 0.003	1	No	No
Sodium (mg/L) - TWc	17-Jul-2023	108	20.0*	Yes	Yes
Sodium (mg/L) – TW3	17-Jul-2023	31.7	20.0*	Yes	Yes

*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

Organic Parameters

- MAC = Maximum Allowable Concentration as per O.Reg 169/03
- BDL = Below the laboratory detection level

TREATED WATER	Sample Date	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
1,1-Dichloroethylene (ug/L)-TWc	4-Mar-2024	< MDL 0.33	14	No	No
1,2-Dichlorobenzene (ug/L)-TWc	4-Mar-2024	< MDL 0.41	200	No	No
1,2-Dichloroethane (ug/L)-TWc	4-Mar-2024	< MDL 0.35	5	No	No
1,4-Dichlorobenzene (ug/L)-TWc	4-Mar-2024	< MDL 0.36	5	No	No
2,3,4,6-Tetrachlorophenol (ug/L)-TWc	4-Mar-2024	< MDL 0.2	100	No	No
2,4,6-Trichlorophenol (ug/L)-TWc	4-Mar-2024	< MDL 0.25	5	No	No
2,4-Dichlorophenol (ug/L)-TWc	4-Mar-2024	< MDL 0.15	900	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TWc	4-Mar-2024	< MDL 0.19	100	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TWc	4-Mar-2024	< MDL 0.12	100	No	No
Alachlor (ug/L) -TWc	4-Mar-2024	< MDL 0.02	5	No	No
Atrazine + N-dealkylated metabolites (ug/L)-TWc	4-Mar-2024	< MDL 0.01	5	No	No
Azinphos-methyl (ug/L)-TWc	4-Mar-2024	< MDL 0.05	20	No	No
Benzene (ug/L)-TWc	4-Mar-2024	< MDL 0.32	1	No	No
Benzo(a)pyrene (ug/L)-TWc	4-Mar-2024	< MDL 0.004	0.01	No	No
Bromoxynil (ug/L)-TWc	4-Mar-2024	< MDL 0.33	5	No	No
Carbaryl (ug/L)-TWc	4-Mar-2024	< MDL 0.05	90	No	No
Carbofuran (ug/L) -TWc	4-Mar-2024	< MDL 0.01	90	No	No
Carbon Tetrachloride (ug/L) -TWc	4-Mar-2024	< MDL 0.17	2	No	No
Chlorpyrifos (ug/L) -TWc	4-Mar-2024	< MDL 0.02	90	No	No

Diazinon (ug/L)-TWc	4-Mar-2024	< MDL 0.02	20	No	No
Dicamba (ug/L)-TWc	4-Mar-2024	< MDL 0.2	120	No	No
Dichloromethane (Methylene Chloride) (ug/L)-TWc	4-Mar-2024	< MDL 0.35	50	No	No
Diclofop-methyl (ug/L)-TWc	4-Mar-2024	< MDL 0.4	9	No	No
Dimethoate (ug/L)-TWc	4-Mar-2024	< MDL 0.06	20	No	No
Diquat (ug/L)-TWc	4-Mar-2024	< MDL 1	70	No	No
Diuron (ug/L)-TWc	4-Mar-2024	< MDL 0.03	150	No	No
Glyphosate (ug/L)-TWc	4-Mar-2024	< MDL 1	280	No	No
Malathion (ug/L)-TWc	4-Mar-2024	< MDL 0.02	190	No	No
Metolachlor (ug/L)-TWc	4-Mar-2024	< MDL 0.01	50	No	No
Metribuzin (ug/L)-TWc	4-Mar-2024	< MDL 0.02	80	No	No
Monochlorobenzene (Chlorobenzene) (ug/L)-TWc	4-Mar-2024	< MDL 0.3	80	No	No
Paraquat (ug/L)-TWc	4-Mar-2024	< MDL 1	10	No	No
PCB (ug/L)-TWc	4-Mar-2024	< MDL 0.04	3	No	No
Pentachlorophenol (ug/L)-TWc	4-Mar-2024	< MDL 0.15	60	No	No
Phorate (ug/L)-TWc	4-Mar-2024	< MDL 0.01	2	No	No
Picloram (ug/L)-TWc	4-Mar-2024	< MDL 1	190	No	No
Prometryne (ug/L)-TWc	4-Mar-2024	< MDL 0.03	1	No	No
Simazine (ug/L)-TWc	4-Mar-2024	< MDL 0.01	10	No	No
Terbufos (ug/L)-TWc	4-Mar-2024	< MDL 0.01	1	No	No
Tetrachloroethylene (ug/L)-TWc	4-Mar-2024	< MDL 0.35	10	No	No
Triallate (ug/L) -TWc	4-Mar-2024	< MDL 0.01	230	No	No
Trichloroethylene (ug/L)-TWc	4-Mar-2024	< MDL 0.44	5	No	No
Trifluralin (ug/L)-TWc	4-Mar-2024	< MDL 0.02	45	No	No
Vinyl Chloride (ug/L)-TWc	4-Mar-2024	< MDL 0.17	1	No	No
1,1-Dichloroethylene (ug/L)-TW3	4-Mar-2024	< MDL 0.33	14	No	No
1,2-Dichlorobenzene (ug/L)-TW3	4-Mar-2024	< MDL 0.41	200	No	No
1,2-Dichloroethane (ug/L)-TW3	4-Mar-2024	< MDL 0.35	5	No	No
1,4-Dichlorobenzene (ug/L)-TW3	4-Mar-2024	< MDL 0.36	5	No	No
2,3,4,6-Tetrachlorophenol (ug/L)-TW3	4-Mar-2024	< MDL 0.2	100	No	No
2,4,6-Trichlorophenol (ug/L)-TW3	4-Mar-2024	< MDL 0.25	5	No	No
2,4-Dichlorophenol (ug/L)-TW3	4-Mar-2024	< MDL 0.15	900	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW3	4-Mar-2024	< MDL 0.19	100	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW3	4-Mar-2024	< MDL 0.12	100	No	No
Alachlor (ug/L) -TW3	4-Mar-2024	< MDL 0.02	5	No	No
Atrazine + N-dealkylated metabolites (ug/L)-TW3	4-Mar-2024	< MDL 0.01	5	No	No
Azinphos-methyl (ug/L)-TW3	4-Mar-2024	< MDL 0.05	20	No	No
Benzene (ug/L)-TW3	4-Mar-2024	< MDL 0.32	1	No	No
Benzo(a)pyrene (ug/L)-TW3	4-Mar-2024	< MDL 0.004	0.01	No	No
Bromoxynil (ug/L)-TW3	4-Mar-2024	< MDL 0.33	5	No	No
Carbaryl (ug/L)-TW3	4-Mar-2024	< MDL 0.05	90	No	No
Carbofuran (ug/L) -TW3	4-Mar-2024	< MDL 0.01	90	No	No

Carbon Tetrachloride (ug/L) -TW3	4-Mar-2024	< MDL 0.17	2	No	No
Chlorpyrifos (ug/L) -TW3	4-Mar-2024	< MDL 0.02	90	No	No
Diazinon (ug/L)-TW3	4-Mar-2024	< MDL 0.02	20	No	No
Dicamba (ug/L)-TW3	4-Mar-2024	< MDL 0.2	120	No	No
Dichloromethane (Methylene Chloride) (ug/L)-TW3	4-Mar-2024	< MDL 0.35	50	No	No
Diclofop-methyl (ug/L)-TW3	4-Mar-2024	< MDL 0.4	9	No	No
Dimethoate (ug/L)-TW3	4-Mar-2024	< MDL 0.06	20	No	No
Diquat (ug/L)-TW3	4-Mar-2024	< MDL 1	70	No	No
Diuron (ug/L)-TW3	4-Mar-2024	< MDL 0.02	150	No	No
Glyphosate (ug/L)-TW3	4-Mar-2024	< MDL 0.01	280	No	No
Malathion (ug/L)-TW3	4-Mar-2024	< MDL 0.02	190	No	No
Metolachlor (ug/L)-TW3	4-Mar-2024	< MDL 0.3	50	No	No
Metribuzin (ug/L)-TW3	4-Mar-2024	< MDL 1	80	No	No
Monochlorobenzene (Chlorobenzene) (ug/L)-TW3	4-Mar-2024	< MDL 0.04	80	No	No
Paraquat (ug/L)-TW3	4-Mar-2024	< MDL 0.15	10	No	No
PCB (ug/L)-TW3	4-Mar-2024	< MDL 0.01	3	No	No
Pentachlorophenol (ug/L)-TW3	4-Mar-2024	< MDL 1	60	No	No
Prometryne (ug/L)-TW3	4-Mar-2024	< MDL 0.03	1	No	No
Simazine (ug/L)-TW3	4-Mar-2024	< MDL 0.01	10	No	No
Terbufos (ug/L)-TW3	4-Mar-2024	< MDL 0.01	1	No	No
Tetrachloroethylene (ug/L)-TW3	4-Mar-2024	< MDL 0.35	10	No	No
Triallate (ug/L) -TW3	4-Mar-2024	< MDL 0.01	230	No	No
Trichloroethylene (ug/L)-TW3	4-Mar-2024	< MDL 0.44	5	No	No
Trifluralin (ug/L)-TW3	4-Mar-2024	< MDL 0.02	45	No	No
Vinyl Chloride (ug/L)-TW3	4-Mar-2024	< MDL 0.17	1	No	No
DISTRIBUTION WATER					
Trihalomethane: Total (ug/L) Annual Average - DW	2024	33.37	100	No	No
HAA Total (ug/L) Annual Average - DW	2024	11.65	80	No	No

Lead Sampling

The Lead Sampling Program is required under O.Reg 170/03. This system qualified for the plumbing exemption. This facility is on a reduced sampling schedule and lead is sampled every 36 months, the last samples were taken in 2021.

Location	Date	Lead (mg/L)	pH	Alkalinity (mg/L) as CACO3
Hydrant #47	12-Mar-24	0.08	7.69	294
Hydrant #68	12-Mar-24	0.26	7.71	270
Hydrant #47	09-Sept-24	0.03	7.93	300
Hydrant #68	09-Sept-24	0.27	7.95	301

Maintenance Summary

OCWA uses a risk-based preventative maintenance framework that ensures assets are maintained to manufacturer's and/or industry standards. Maintenance is completed using various tools and operational supports.

OCWA uses a Workplace Maintenance System (WMS). WMS is a maintenance tracking system that can generate work orders as well as give summaries of completed and scheduled work. During the year, the operating authority at the facility generates scheduled work orders on a weekly, monthly and annual basis. The service work is recorded in the work order history. This ensures routine and preventive maintenance is carried out. Emergency and capital repair maintenance is completed and added to the system.

Preventative Maintenance Work Orders Completed	341
Operational Maintenance Work Orders Completed	17
Capital Maintenance Work Orders Completed	0

Capital projects are listed and provided to the The Township of Havelock-Belmont-Methuen in the form of a "Capital Forecast". This list is developed by facility staff and provides recommendations for facility components requiring upgrading or improvement.

QEMS

A re-accreditation Audit was conducted by Intertek SAI Global on May 12th, 2024. The Township of Havelock-Belmont-Methuen's Quality Management System conforms to the Standard.

Maintenance Highlights: major expenses incurred to install, repair or replace required equipment

New flow control valves
Repair 3 Hydrants
Water Supply Feasibility study
Air release valve

Water Taking and Transfer Data

Data for the reporting period of January 1, 2024 - December 31, 2024 was submitted electronically to the Ministry of the Environment on February 04, 2024 under Permit to Take Water PTTW 3448-9LMT5K and Permit to Take Water PTTW P-300-1294150031.