

Vankleek Hill Drinking Water System

Waterworks # 260002395
System Category – Large Municipal Residential

Annual Water Report

Prepared For: Champlain Township

Reporting Period of January 1st – December 31st 2025

Issued: February 26, 2026

Revision: 0

Operating Authority:



This report has been prepared to satisfy the annual reporting requirements in O.Reg 170/03 Section 11 and Schedule 22

Table of Contents

Report Availability	1
Compliance Report Card	1
System Process Description	1
Treatment & Distribution	1
Treatment Chemicals used during the reporting year:	2
Summary of Non-Compliance	2
Adverse Water Quality Incidents.....	2
Non-Compliance	2
Non-Compliance Identified in a Ministry Inspection:.....	2
Flows	3
Distribution Water Flows.....	3
Monthly Flows.....	3
Annual Total Flow Comparison (m ³)	3
Microbiological Testing.....	4
Operational Testing	4
Schedule 15 Sampling:	4
Organic Parameters	4
Additional Legislated Samples	5
Major Maintenance Summary	5
Distribution Maintenance.....	5

Report Availability

This system does not serve more than 10,000 residence and the annual reports will be available to residents on the Champlain Township website.

Compliance Report Card

Compliance Event	# of Events
Ministry of Environment Inspections	1 – Inspection completed on September 5, 2025 There were no non-compliances identified – 100%
Ministry of Labour Inspections	0
QEMS External Audit	External audit completed <ul style="list-style-type: none"> • 4 Opportunities for Improvement (OFI)'s identified • 1 Minor Non-Conformity
AWQI's/BWA	3
Non-Compliance	0
Community Complaints	1
Spills	0
Watermain Breaks	2

System Process Description

Treatment & Distribution

The Vankleek Hill Water Distribution System is a standalone distribution system, receiving treated water from the Hawkesbury Water Treatment Plant.

The system consists of the following:

- A booster station located at the junctions of Highways #34 and #17, housing two horizontal water pumps rated at 32.1 L/s (pumping water to Vankleek Hill), a dual chloramination system, online total and free analyzers with chart recorder, flow measurement and related

electrical and instrumentation

- A booster station located at the standpipe in Vankleek Hill houses two vertical water pumps rated at 143 L/s (for fire protection), flow control and related electrical and instrumentation; a 10 km 400 mm transmission line with 16 valve chambers
- A 2,270 m³ standpipe
- Approximately 14.6 km of watermains, ranging from 150 mm to 300 mm and approximately 85 hydrants.
- Standby power is provided at the Highway 34 booster station, which maintains standpipe water level and town pressure.

This booster station, transmission line, and stand pipe operate under Drinking Water License Number 174-102 & Drinking Water Works Permit Number 174-202.

Treatment Chemicals used during the reporting year:

Chemical Name	Use	Supplier
Sodium Hypochlorite	Disinfection	Brenntag
Ammonium Sulphate	Disinfection	Brenntag

Summary of Non-Compliance

Adverse Water Quality Incidents

Date	AWQI #	Location	Problem	Legislation	Corrective Action Taken
November 26, 2025	170857	SPS1	Adverse sample NDOGT	O.Reg 170/03	Flushed and resample
November 27, 2025	170869	SPS1	Adverse sample NDOGT	O.Reg 170/03	Flushed, Resample and issue a BWA
November 28, 2025	170890	SPS1	Adverse sample NDOGT	O.Reg 170/03	Flushed, Resample BWA issued

Non-Compliance

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
There were no non-compliance issues reported during the reporting period.				

Non-Compliance Identified in a Ministry Inspection:

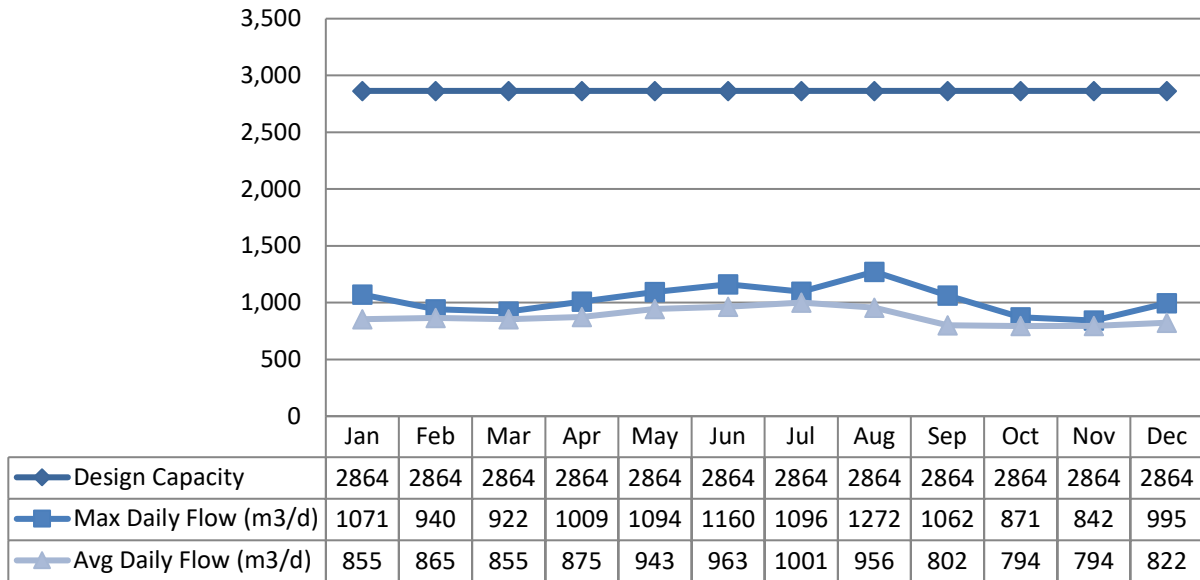
Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
There were no non-compliance issues reported during the reporting period.				

Flows

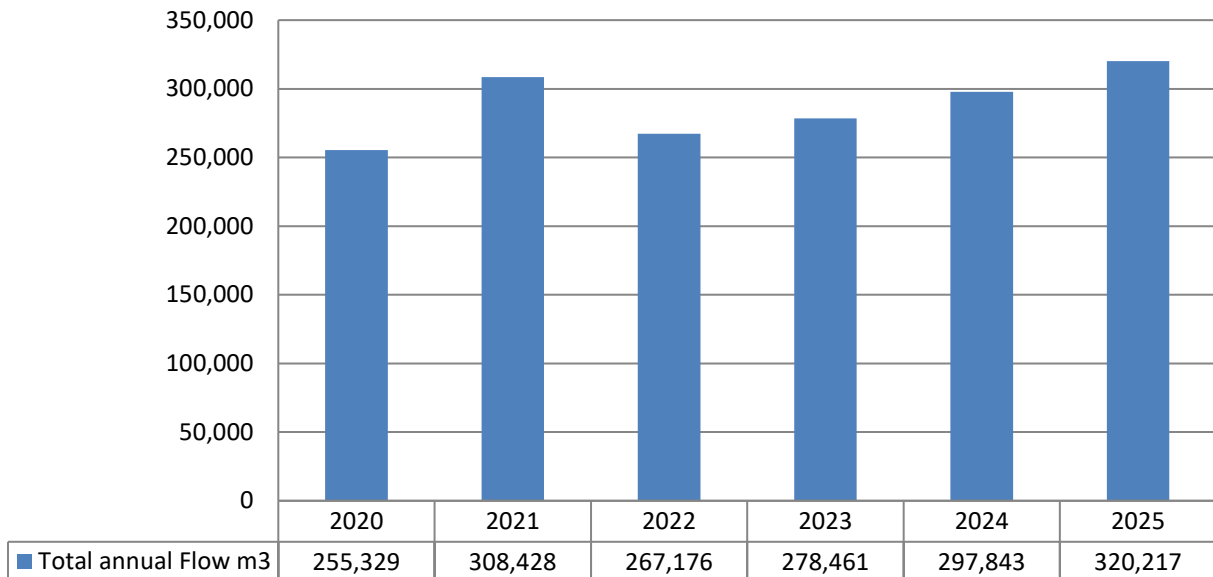
With a 2025 annual average day flow of 877.3 m³/d, the Vankleek Hill Water Distribution System is operating slightly above one quarter of its design capacity of 2864 m³/day.

Distribution Water Flows

Monthly Flows



Annual Total Flow Comparison (m³)



Regulatory Sample Results Summary

Microbiological Testing

	No. of Samples Collected	Range of E.Coli Results		Range of Total Coliform Results		No. of Samples Collected	Range of HPC Results	
		Min	Max	Min	Max		Min	Max
Distribution Water	180	0	NDOGT	0	NDOGT	56	<2	500

Operational Testing

	No. of Samples Collected	Range of Results	
		Minimum	Maximum
Combined Chlorine Residual, On-Line (mg/L) - DW	8760	1.15	2.32
Combined Chlorine Residual, DW Field (mg/L) Lab Upload - DW	180	1.54	2.29

NOTE: spikes recorded by on-line instrumentation were a result of power flicks and various maintenance/calibration activities. All spikes are reviewed for compliance with O.Reg 170/03

Schedule 15 Sampling:

The Schedule 15 Sampling is required under O.Reg 170/03. This system is under reduced sampling. No plumbing samples were collected.

Distribution System	Number of Sampling Points	Number of Samples	Range of Results		MAC (mg/L)	Number of Exceedances
			Minimum	Maximum		
Alkalinity (mg/L)	2	4	24	35	N/A	N/A
pH	2	4	7.5	7.7	N/A	N/A
Lead (mg/L)	2	4	0.00002	0.00018	0.01	N/A

Organic Parameters

This parameter was tested quarterly as a requirement under O.Reg 170/03.

	Sample Date (yyyy/mm/dd)	Running Average	MAC	Number of Exceedances	
				MAC	1/2 MAC
Distribution Water					
Trihalomethane: Total (ug/L) Annual Running Average - DW	January 5, 2026	60.25	100	No	Yes
Haloacetic Acids: Total (ug/L) Annual Running Average – DW	January 5, 2026	43.08	80	No	Yes

MAC = Maximum Allowable Concentration as per O.Reg 169/03

BDL = Below the laboratory detection level

Additional Legislated Samples

There was no additional sampling required.

Major Maintenance Summary**Distribution Maintenance**

Date	Location Reference	Details
2025	Booster Hwy 34	HWY#34 booster station emergency repairs
2025	VKH distribution	Multiple locates
2025	VKH Distribution	Watermains, curb shut off and valve boxes emergency repairs
April 29	VKH Distribution	Hydrant emergency repairs
June 6	HWY 34	Flow test
August 7	58 Derby Rd	WMB repair
August 14	89 Grout St	WMB repair
December 23	Booster Station	Pump#1 new bearing installed