

Port Colborne Water Treatment Plant

Regional Municipality of Niagara

2024 Summary Report

(Prepared under Ontario Regulation 170/03)

January 1 to December 31, 2024

Ministry of the Environment, Conservation and Parks

Municipal Drinking Water License # 007-101 Drinking Water Works Permit # 007-201

Port Colborne Water Treatment Plant - 2024 Summary Report

This report summarizes the water flows for the Port Colborne Water Treatment Plant, drinking water system number 220002075, from January 1 to December 31, 2024. This report satisfies the requirements of Ontario Regulation 170/03 – Drinking Water Systems.

Inspection Rating

The Port Colborne Water Treatment Plant was granted a 100% inspection rating during the 2024 Ministry of Environment, Conservation and Parks annual drinking water system inspection.

Summary of Non-Compliance

The Port Colborne Water Treatment Plant was operated in such a way that at no time did it fail to meet or exceed the requirements of the Safe Drinking Water Act, associated regulations, the system's approval, or any order that may have been issued for this reporting period.

Summary of Water Treatment Plant Flows

The flow rates captured below are moments in time, and can be affected by various circumstances, such as pump changes or valve position. It is not unusual to have higher or lower than normal flows for this reason.

*Total Waste Sludge (TSL) sensor was offline between (Jan- May) for recalibration.

Month	Total Flow Raw (ML)	Total Flow Treated (ML)	Averag e Day Raw (ML)	Average Day Treated (ML)	Maximum Daily Treated (ML)	Minimum Day Treated (ML)	Maximum Flow Rate Treated (ML/d))	Minimum Flow Rate Treated (ML/d)	Total Waste Sludge (ML)
Jan	300.650	262.270	9.698	8.460	*11.170	6.260	20.626	3.723	*0.000
Feb	305.800	265.490	10.545	9.155	*11.550	6.480	19.959	1.477	*0.000
Mar	282.478	256.890	9.112	8.287	9.670	6.660	20.051	7.733	*0.000
Apr	251.700	232.100	8.390	7.737	9.110	6.390	21.641	5.609	*0.000
May	271.440	247.980	8.756	7.999	9.440	6.450	18.482	6.790	*0.000
Jun	265.860	240.650	8.862	8.022	9.240	6.260	17.456	7.497	508.036
Jul	270.070	248.070	8.712	8.002	9.580	6.010	17.405	7.979	3.268
Aug	265.330	241.940	8.559	7.805	9.300	5.820	18.287	7.456	5.288
Sep	244.030	228.030	8.134	7.601	9.035	5.304	16.051	8.062	2.323
Oct	235.335	225.211	7.591	7.265	8.750	5.406	26.713	2.399	1.826
Nov	233.135	220.509	7.771	7.350	8.680	5.810	15.744	7.856	1.764
Dec	280.100	267.690	9.035	8.635	10.350	6.320	18.974	3.465	2.045

Maximum Daily Treated (ML) flow anomalies

^{*}Jan 27th Main break on Elm Street attributed to system water loss.

^{*}Feb 1st Vehicular accident in Welland Canal resulted in plant shutdown which required to make up for loss during shutdown.

Month	Total Flow Raw (ML)	Total Flow Treated (ML)	Average Day Raw (ML)	Average Day Treated (ML)	Maximum Day Treated (ML)	Minimum Day Treated (ML)	Maximum Flow Rate Treated (ML/d)	Minimum Flow Rate Treated (ML/d)	Total Waste Sludge (ML)
Total	3033.810	2735.980							10.978
Min						4.790		3.495	0.000
Max					11.550				10.978
Avg			8.313	7.499					0.915

Comparison of Actual to System Approved Flow

Flow rates are required by Municipal Drinking Water License number 007-101.

Maximum daily flow: 36.000 MLMaximum flow rate: 36.000 ML/day

Month	Average	% of Rated	Maximum	% of	Maximum	% of
	_ Day	Capacity	Day	Rated	Flow Rate	Rated
	Treated		Treated	Capacity	Treated	Capacity
	(ML)		(ML)		(ML/d)	
Jan	8.460	23.50%	11.170	31.02%	20.626	57.27%
Feb	9.155	25.41%	11.550	32.04%	19.959	55.41%
Mar	8.287	23.00%	9.670	26.86%	20.051	55.69%
Apr	7.737	21.47%	9.110	24.30%	21.641	60.11%
May	7.999	22.19%	9.440	26.22%	18.482	51.33%
Jun	8.022	22.20%	9.240	25.66%	17.456	48.47%
Jul	8.002	22.22%	9.580	26.61%	17.405	48.33%
Aug	7.805	21.66%	9.300	25.83%	18.287	50.77%
Sep	7.601	21.11%	9.035	25.08%	16.051	44.58%
Oct	7.265	20.16%	8.750	24.30%	26.713	72.25%
Nov	7.350	20.41%	8.680	24.11%	15.744	43.72%
Dec	8.635	23.97%	10.350	28.75%	18.974	52.69%