



DeCew Falls Water Treatment Plant

Regional Municipality of Niagara

2023 Summary Report

(Prepared under Ontario Regulation 170/03)

January 1 to December 31, 2023

Ministry of the Environment, Conservation and Parks

Municipal Drinking Water License # 007-102

Drinking Water Works Permit # 007-202

DeCew Falls Water Treatment Plant - 2023 Summary Report

This report summarizes the water flows for the DeCew Falls Water Treatment Plant, drinking water system number 220002066, from January 1 to December 31, 2023. This report satisfies the requirements of Ontario Regulation 170/03 – Drinking Water Systems.

Summary of Non-Compliance

Inspection Rating	100%
Non-Compliance	The following instance(s) of non-compliance were noted during the inspection: Administrative- Non-Compliance.
Event Details	Section 3.2 of the 2020 Watermain Disinfection Procedure (WDP) requires that the documentation, when using continuous disinfection method, includes the decreases in chlorine concentration after contact time in mg/L and in percentage for each sampling point. Although the Region's form specified the limits for the chlorine concentration decreases to ensure adequate disinfection, the individual decreases in concentrations for the two Form 1 projects were not written down on the forms or any other records.
Corrective Actions	By June 30, 2023, the Region shall arrange to submit the following to a Water Inspector of the Ministry's Niagara District Office: An updated watermain commissioning form which include all the documentation required in Section 3.1 of the WDP, including at a minimum, columns for decrease in chlorine concentrations in mg/L and in percentage, and A list of the personnel who were trained on the updated watermain commissioning form.

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.

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)
Jan	1717.153	1482.358	55.392	47.818	52.456	45.032	100.080	25.545	0.650
Feb	1534.722	1314.136	54.812	46.933	50.353	44.454	94.302	26.964	6.157
Mar	1683.987	1462.044	54.322	47.163	50.714	44.500	86.363	24.740	4.943
Apr	1619.902	1428.135	53.997	47.605	52.034	44.991	74.638	18.150	3.122
May	1926.901	1703.873	62.158	54.964	70.611	46.689	86.820	22.229	0.737
Jun	2089.383	1841.016	69.646	61.367	73.327	53.102	90.956	37.576	6.070
Jul	2131.567	1869.602	68.760	60.310	72.679	52.653	88.016	35.697	0.731
Aug	2031.898	1727.655	65.545	55.731	60.930	50.091	76.230	26.271	0.434
Sep	2018.998	1733.258	67.300	57.775	69.715	49.145	92.992	18.365	0.650
Oct	1819.948	1586.257	58.708	51.170	61.847	45.761	79.846	28.368	4.379
Nov	1665.754	1474.804	55.525	49.160	54.266	45.885	72.338	23.629	3.209
Dec	1838.049	1659.419	59.292	53.530	55.719	51.020	75.194	26.058	2.948

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	22078.262	19282.557							34.032
Min						44.454		18.150	0.434
Max					73.327		100.080		6.157
Avg.			60.455	52.794					2.836

Comparison of Actual to System Approved Flow

Flow rates are required by Municipal Drinking Water Licence number 007-102.

- Maximum daily flow: 227.300 ML
- Maximum flow rate: 227.300 ML/day

Month	Average Day Treated (ML)	% of Rated Capacity	Maximum Day Treated (ML)	% of Rated Capacity	Maximum Flow Rate Treated (ML/d)	% of Rated Capacity
Jan	47.818	21.03	52.456	23.077	100.080	44.000
Feb	46.933	20.648	50.353	22.152	94.302	41.480
Mar	47.163	20.749	50.714	22.311	86.363	36.394
Apr	47.605	20.943	52.034	22.892	74.638	32.836
May	54.964	24.181	70.611	31.065	86.820	38.196
Jun	61.367	26.998	73.327	32.260	90.956	40.015
Jul	60.310	26.533	72.679	31.974	88.016	39.133
Aug	55.731	24.518	60.930	26.805	76.230	33.537
Sep	57.775	25.417	69.715	30.670	92.992	40.911
Oct	51.170	22.512	61.847	27.209	79.846	35.128
Nov	49.160	21.627	54.266	23.874	72.338	31.824
Dec	53.530	23.550	55.719	24.513	75.194	33.081