



REGIONAL MUNICIPALITY OF NIAGARA
Public Works Department
Water & Wastewater Services Division

GRIMSBY WATER TREATMENT PLANT

ANNUAL SUMMARY REPORT

(Prepared under Ontario Regulation 170/03)

January 1 to December 31, 2019

Ministry of the Environment, Conservation and Parks

Municipal Drinking Water License # 007-105
Drinking Water Works Permit # 007-205

1. Failure to meet with the requirements of the Act, the regulation, the system's approval:

The Grimsby Water Treatment Plant was found to be in non-compliance with regulations and/or system Licence, as follows:

Inspection Rating	98.34%
Non-Compliance	Niagara Region was found to be in non-compliance with subsection 6-1.1 (1) of Schedule 6 of O. Reg. 170/03 which specifies that weekly samples are to be taken 5 to 10 days apart.
Event Details	Section 4.0 of schedule C of the Municipal Drinking Water Licence requires weekly sampling of treated process waste water for free chlorine residuals prior to discharge to the environment. Sampling was conducted on a weekly basis during the inspection period except between January 9 and January 21, 2019 where the tests were performed 12 days apart.
Corrective Actions	Internal operating procedures will be updated to ensure all sampling requirements are captured. In addition, affected staff are required to complete introductory quality and compliance training within six months of arrival and once every three years thereafter.

2. A summary of flows for the reporting period January 1, 2019 – December 31, 2019:

2019	TOTAL FLOW	TOTAL FLOW	AVERAGE DAY	AVERAGE DAY	MAX. DAY	MIN. DAY	MAX. FLOW RATE	MIN. FLOW RATE	WASTE SLUDGE
	Raw (ML)	Treated (ML)	Raw (ML)	Treated (ML)	Treated (ML)	Treated (ML)	Treated (ML/D)	Treated (ML/D)	(ML)
Jan	404.671	404.464	13.054	13.232	20.014	11.027	15.656	13.597	0.650
Feb	360.032	360.057	12.858	12.859	13.675	11.572	17.109	7.749	0.650
Mar	400.309	399.968	12.913	12.902	14.086	11.892	18.958	7.209	0.694
Apr	383.980	382.635	12.799	12.755	14.655	11.393	18.045	7.010	0.780
May	428.875	422.888	13.835	13.642	15.650	11.456	18.546	8.684	1.951
Jun	460.855	457.213	15.362	15.240	18.333	12.079	21.935	2.472	0.694
Jul	550.331	554.625	17.753	17.891	20.744	15.408	25.175	7.348	0.939
Aug	471.050	491.739	15.195	15.863	19.098	13.009	23.062	9.300	0.911
Sep	409.215	433.978	13.641	14.466	16.323	12.405	19.230	9.429	0.911
Oct	382.356	410.761	12.334	13.250	14.926	12.199	18.051	3.525	2.255
Nov	352.285	392.247	11.743	13.075	14.125	11.903	17.453	8.155	0.477
Dec	357.343	401.711	11.527	12.958	13.959	11.164	17.761	6.985	0.650
TOTAL	4961.302	5112.286							11.562
MIN						11.027		2.472	0.477
MAX					20.744		73.432		2.255
AVG			13.584	14.011					0.963

* The flow rates are moments in time, and can be affected by various circumstances, such as pump changes or valve position and therefore not unusual to have higher or lower than normal flows.

3. A comparison of actual flows to that of the flow rates set out in the system's approval:

Flow rates as set in:

- Municipal Drinking Water License # 007-105
- Drinking Water Works Permit # 007-205

Maximum daily flow: 44.000 ML

Maximum flow rate: 44.000 ML/day

2019	AVERAGE DAY Treated (ML)	% OF RATED CAPACITY	MAX. DAY Treated (ML)	% OF RATED CAPACITY	MAX. FLOW RATE Treated (ML/d)	% OF RATED CAPACITY
Jan	13.232	30.1%	20.014	45.5%	15.656	35.6%
Feb	12.859	29.2%	13.675	31.1%	17.109	38.9%
Mar	12.902	29.3%	14.086	32.0%	18.958	43.1%
Apr	12.755	29.0%	14.655	33.3%	18.045	41.0%
May	13.642	31.0%	15.65	35.6%	18.546	42.2%
Jun	15.240	34.6%	18.333	41.7%	21.935	49.9%
Jul	17.891	40.7%	20.744	47.1%	25.175	57.2%
Aug	15.863	36.1%	19.098	43.4%	23.062	52.4%
Sep	14.466	32.9%	16.323	37.1%	19.23	43.7%
Oct	13.250	30.1%	14.926	33.9%	18.051	41.0%
Nov	13.075	29.7%	14.125	32.1%	17.453	39.7%
Dec	12.958	29.5%	13.959	31.7%	17.761	40.4%