

2015 Compliance Report for the Wallaceburg Water Pollution Control Plant Public Utilities Commission for the Municipality of Chatham-Kent

The Wallaceburg Water Pollution Control Plant provides treatment of wastewater for approximately 11,000 residents of the Town of Wallaceburg. Wastewater is collected and pumped to the plant by 10 sanitary pump stations located throughout the community.

The Wallaceburg Water Pollution Control Plant is a Conventional Activated Sludge Plant with the plant final effluent passing through an Ultra Violet Light Disinfection System. The processed final effluent is then discharged to the Sydenham River. The plant was first built in the late 1960s with a major expansion and upgrading of the facility in 1991.

The rated capacity of the plant is 10,800m³/day average day flow calculated for the calendar year.

Maximum hydraulic capacity for primary treatment and disinfection facilities is 35,000m³/day.

The following processes are included in this treatment system:

- Raw sewage pumping
- Screening collection and removal
- Aerated grit tank
- Primary treatment of raw sewage with sludge collection.
- Chemical phosphorus removal
- Biological treatment using Conventional Activated Sludge for secondary treatment.
- Final Settling
- Disinfection of final effluent using Ultra Violet Light
- Two-stage anaerobic digestion of sludge
- Sludge Dewatering

Non Compliance issues with the Environmental Compliance Approval 1824-8GTGLU:

April: Exceedance of the average monthly concentration effluent limit for Total Ammonia Nitrogen as N: limit is 1.5 mg/L; April monthly concentration was 2.71 mg/L.

April: Exceedance of the average monthly concentration effluent limit for E. coli; limit is Geometric Mean Density of 200 organisms / 100 mL; April 10 sample was overgrown.

Both of these issues resulted from the loss of both commercial and generator power on April 10. Additional generator power has now been restored.

2015 Compliance Report for the Wallaceburg Water Pollution Control Plant
Plant Rated Capacity: 10,800 m³/day average daily flow

Total sewage flow to the works during a calendar year divided by the number of days during which sewage was flowing to the works that year

Month	Total Monthly Influent Flow m ³	Avg Daily Influent Flow /Month m ³ /day	Avg Daily Influent Flow/Year m ³ /day	% of Plant Capacity	CBOD5 mg/L	Total S.S. mg/L	Total Ammonia mg/L	Total P mg/L	pH	E.Coli
Limits: Freezing	none	none	10,800	100	25	25	3	1.0	6.5 -8.5	200
Limits: Non Freezing	none	none	10,800	100	25	25	1.5	1.0	6.5 -8.5	200
Jan	119,473	3,854			3.8	5.3	0.36	0.4	7.5	8.4
Feb	95,900	3,425			3.3	2.5	0.49	0.4	7.6	10.0
Mar	217,050	7,002			3.8	5.2	0.97	0.4	7.5	17.0
Apr	173,940	5,798			13.1	16.2	2.71	0.4	7.4	215.7
May	141,610	4,568			3.3	3.3	0.10	0.2	7.2	18.8
Jun	171,750	5,725			2.4	5.8	0.08	0.3	7.4	10.0
Jul	173,634	5,601			2.0	5.0	0.07	0.3	7.3	10.0
Aug	152,930	4,933			2.2	4.4	0.25	0.3	7.3	13.5
Sep	135,660	4,522			2.0	3.8	0.21	0.2	7.3	12.6
Oct	130,680	4,215			2.8	3.5	0.16	0.3	7.2	10.0
Nov	136,120	4,537			2.0	3.4	0.17	0.3	7.3	13.0
Dec	152,660	4,925			2.3	3.8	0.09	0.4	7.3	11.9
Year			4925	46%						
	Yearly Total Flow m ³	Yearly Maximums								
	1,801,407	7,002			13.1	16.2	2.71	0.4	7.6	215.7