

**MUNICIPALITY OF CHATHAM-KENT
PUBLIC UTILITIES COMMISSION**

Wallaceburg Water Pollution Control Plant

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 town.

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 1960's with a major expansion and upgrading of the facility in 1991.

The rated capacity of the plant for primary and secondary treatment is 16,200 m³/day. Maximum hydraulic capacity for primary treatment and disinfection facilities is 35,000 m³/day.

The existing treatment system uses the following processes:

- 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

**Municipality of Chatham-Kent
Public Utilities Commission**

Wallaceburg Water Pollution Control Plant

Effluent Limits	
Effluent Parameter	Monthly Average Concentration in mg/L
Total BOD5	25
Total Suspended Solids	25
Total Ammonia as Nitrogen	1.5 non – freezing period
Total Ammonia as Nitrogen	3.0 freezing period
Total Phosphorus	1.0
E.Coli /100ml cfu	200

**Wallaceburg Water Pollution Control Plant
2007 Reporting Period**

Plant Rated Capacity (m3/day): 16,200

Parameter	Total Monthly Flow m3	Average Daily Flow m3/day	% of Plant Capacity	BOD 5 mg/l	Total S.S. mg/l	Total Ammonia mg/l	Total P mg/l	E.Coli /100ml CFU
JANUARY	242,280	7,815	48.2%	6.80	5.80	0.13	0.41	66.25
FEBURARY	150,110	5,361	33.1%	4.25	5.25	0.43	0.51	12.25
MARCH	202,930	6,546	40.4%	4.00	4.25	0.16	0.23	25.75
APRIL	177,330	5,911	36.5%	3.00	3.80	0.08	0.28	9.00
MAY	182,020	5,872	36.3%	2.00	9.00	0.05	0.40	17.66
JUNE	147,830	4,928	30.4%	3.25	4.50	0.17	0.38	11.62
JULY	137,510	4,584	28.3%	2.00	4.20	0.18	0.58	9.19
AUGUST	158,060	5,099	31.5%	2.50	5.25	0.16	0.47	12.49
SEPTEMBER	139,690	4,656	28.7%	2.20	4.00	0.44	0.45	46.48
OCTOBER	144,900	4,674	28.9%	2.50	4.50	0.10	0.39	17.50
NOVEMBER	147,900	4,930	30.4%	2.25	4.00	0.10	0.32	13.55
DECEMBER	188,880	6,093	37.6%	5.00	11.00	0.71	0.59	16.65
	YEARLY TOTAL FLOW m3	YEARLY AVERAGES						
	2,019,440	5,539	34.2%	3.31	5.50	0.23	0.42	21.53