

**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 m<sup>3</sup>/day. Maximum hydraulic capacity for primary treatment and disinfection facilities is 35,000 m<sup>3</sup>/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**

<b>Effluent Limits</b>	
<b>Effluent Parameter</b>	<b>Monthly Average Concentration in mg/L</b>
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  
2006 Reporting Period**

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

<b>Parameter</b>	<b>Average Daily Flow m3/day</b>	<b>% of Plant Capacity</b>	<b>BOD5 mg/l</b>	<b>Total S.S. mg/l</b>	<b>Total Ammonia mg/l</b>	<b>Total P mg/l</b>	<b>E.Coli /100ml CFU</b>
JANUARY	6,965	43.0%	2.80	4.00	0.17	0.28	41.29
FEBURARY	7,090	43.8%	3.00	7.00	0.27	0.30	37.66
MARCH	6,974	43.0%	4.00	3.25	0.40	0.29	119.62
APRIL	6,734	41.6%	3.00	1.40	0.17	0.38	29.05
MAY	6,468	39.9%	2.50	1.75	0.27	0.74	9.39
JUNE	5,536	34.2%	2.75	3.25	0.94	0.43	30.00
JULY	5,298	32.7%	2.40	3.60	0.12	0.67	12.95
AUGUST	5,153	31.8%	2.00	1.00	0.08	0.61	9.00
SEPTEMBER	5,210	32.2%	2.25	1.25	0.08	0.74	12.16
OCTOBER	6,493	40.1%	3.00	3.00	0.10	0.32	15.80
NOVEMBER	6,658	41.1%	3.00	2.50	0.13	0.41	9.74
DECEMBER	7,094	43.8%	2.50	6.00	0.15	0.45	97.40
<b>AVERAGE</b>	<b>6,306</b>	<b>38.9%</b>	<b>2.77</b>	<b>3.20</b>	<b>0.24</b>	<b>0.47</b>	<b>35.34</b>