

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

BLenheim SEWAGE TREATMENT PLANT

The Blenheim Water Pollution Control Plant provides treatment of wastewater for the former Town of Blenheim, and for Charing Cross, as well as leachate from the Ridge Landfill. Wastewater is collected by a separate sanitary sewer system and conveyed by one raw pump station to the Treatment Lagoons. The treated wastewater is subsequently discharged to the Cameron Drain.

Following several modifications to the original works, approval was received in 1995 for modification of the existing waste stabilization ponds to the New Hamburg Process, and for expansion of hydraulic capacity.

According to the Certificate of Approval, average daily flow of sewage into the treatment plant should not exceed 4,045m³/day, and peak flow shall not exceed 12,046m³/day.

The present treatment system consists of:

- One raw pumping station
- One aeration cell
- Chemical phosphorous removal
- Five waste stabilisation cells
- One filter effluent pump station
- Four effluent sand filters

The underdrain pipes discharge to the outfall structure, and to the Cameron Drain.

Non compliance issues in 2007:

1. Exceedances for Ammonia and Total Phosphorous occurred during the month of November. Subsequently, flow was discontinued for the remainder of the year.

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

Blenheim Sewage Treatment Plant

**Certificate of Approval # 3-0427-94-957
Terms and Conditions-Performance**

Effluent limits	
Effluent Parameter	Monthly Average Concentration mg/L
BOD5	10.0 non - freezing period 15.0 freezing period
Suspended Solids	10.0 non - freezing period 15.0 freezing period
Total Phosphorous	0.5 non - freezing period 1.0 freezing period
Total Ammonia Nitrogen	3.0 non - freezing period 5.0 single non compliance 5.0 freezing period 8.0 single non compliance
Total Residual Chlorine*	0.01
E. coli	200 Organisms per 100mL

*Disinfection facilities are not required by the Certificate of Approval for the Blenheim Sewage Treatment Plant, nor do they exist. For this reason, no data is available for Chlorine Residuals.

**Blenheim Sewage Treatment plant
2007 Reporting Period**

Plant Rated Capacity (1000m3/day): 4.045
Average Daily Flow (1000 m3/day): 2.323
% of Plant Capacity: 58 %
Total Leachate Received (mega litres): 64.7

Parameter	Total Monthly Flow 1000 m3	Average Daily Flow 1000 m3	BOD5 Mg./L	Total S.S. Mg./L	Total P Mg./L	Total Ammonia Mg./L	E coli CFU /100mL Geomean
JANUARY	93.9	3.0					
FEBRUARY	65.6	2.3					
MARCH	80.4	2.6					
APRIL	78.7	2.6	2.0	2.0	0.11	2.00	60
MAY	77.8	2.5	2.0	6.0	0.12	0.31	25
JUNE	65.9	2.1	2.0	1.0	0.08	0.15	15
JULY	59.3	1.9					
AUGUST	64.9	2.1	2.0	4.0	0.11	0.16	38
SEPTEMBER	63.9	2.1	2.0	1.0	0.09	0.18	10
OCTOBER	61.6	2.0	2.0	1.0	0.12	0.05	12
NOVEMBER	62.8	2.1	2.0	1.0	2.90	21.30	10
DECEMBER	80.1	2.6					
TOTAL	854.97						
AVERAGE	71.2	2.3	2.0	2.3	0.50	3.45	19

