

## **2008 Compliance Report for the Blenheim Sewage Treatment Plant Public Utilities Commission for the Municipality of Chatham-Kent**

The Blenheim Sewage Treatment 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 stabilisation 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 4,045m<sup>3</sup>/day, and peak flow shall not exceed 12,046m<sup>3</sup>/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 2008:**

Exceedances of Total Ammonia Nitrogen occurred during the month of April.

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**Plant Rated Capacity (m3/day): 4,045**

<b>Month</b>	<b>Total Monthly Flow m3</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>
Limits: Freezing				<b>15</b>	<b>15</b>	<b>5.0</b>	<b>1.0</b>	
Limits: Non Freezing		<b>4,045</b>		<b>10</b>	<b>10</b>	<b>3.0</b>	<b>0.5</b>	<b>200</b>
<b>January</b>	80,776	2,606	64					
<b>February</b>	85,229	2,841	70					
<b>March</b>	97,337	3,140	78					
<b>April</b>	81,575	2,719	67	5	1	3.9	0.15	33
<b>May</b>	71,930	2,320	57	2	1	0.85	0.12	10
<b>June</b>	69,307	2,310	57	2	1	0.08	0.10	10
<b>July</b>	70,307	2,268	56	2	1	0.14	0.12	10
<b>August</b>	59,361	1,915	47	2	1	0.15	0.16	14
<b>September</b>	65,816	2,194	54					
<b>October</b>	61,812	1,994	49	2	1	0.09	0.08	10
<b>November</b>	70,575	2,353	58	2	1	0.05	0.14	10
<b>December</b>	91,140	2,940	73	2	1	0.06	0.13	10
	<b>Yearly Total Flow m3</b>	<b>Yearly Averages</b>						
	905,165	2,467	61	2	1	0.67	0.13	13