

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

**RIDGETOWN SEWAGE TREATMENT LAGOONS**

The Ridgetown Sewage Treatment Lagoons provide treatment of wastewater for the former Town of Ridgetown. 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 Gawne Drain.

Ontario Water Resources Commission Approval for the Ridgetown Sewage Treatment Lagoons was given in 1972. The system was subsequently converted to the New Hamburg Process with the addition of an aeration cell and sand filters in 2002.

According to the Certificate of Approval, average daily flow of sewage into the treatment plant should not exceed 1,537m<sup>3</sup>/day and peak flow should not exceed 2,990m<sup>3</sup>/day.

The present treatment system consists of:

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

The underdrain pipes discharge to the outlet channel, and to the Gawne Drain.

**Non compliance issues in 2007:**

1. Exceedance of average daily flow limits occurred during the months of January and March. However, the annual average daily flow was 1,299 m<sup>3</sup>/day or 84.5 %.
2. Exceedances of E. coli occurred during the months of August, September and November.
3. Exceedances of Total Suspended Solids occurred during the months of August and September. As well, Total Phosphorous exceeded in September.

Replacement of the current facility is being undertaken, to accommodate adequate hydraulic storage and system capacity.

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

**Ridgetown Sewage Treatment Lagoons**

**Certificate of Approval # 6818-4RXQY5  
Terms and Conditions-Performance**

<b>Effluent Limits</b>	
<b>Effluent Parameter</b>	<b>Monthly Average Concentration in mg/L</b>
CBOD5	10
Total Suspended Solids	10
Total Phosphorous	0.5
Total Ammonia Nitrogen	2.0 non – freezing period
Total Ammonia Nitrogen	5.0 freezing period
E. coli	200 Organisms per 100mL

**Ridgetown Sewage Treatment Lagoons  
2007 Reporting Period**

**Plant Rated Capacity (1000 m3/day): 1.537**  
**Average Daily Flow (1000 m3/day): 1.299**  
**% of Plant Capacity: 84.5%**

<b>Parameter</b>	<b>Total Monthly Flow 1000m3</b>	<b>Average Daily Flow 1000 m3</b>	<b>CBOD5 Mg./L</b>	<b>Total S/S Mg./L</b>	<b>Total P mg/L</b>	<b>Total Ammonia Mg./L</b>	<b>E coli CFU /100mL Geomean</b>
JANUARY	57.0	1.8					
FEBRUARY	40.1	1.4					
MARCH	49.5	1.6					
APRIL	40.9	1.4	3.0	2.0	0.17	0.2	10
MAY	43.7	1.4	2.0	6.0	0.16	0.2	10
JUNE	36.0	1.2	2.0	1.0	0.23	0.2	23
JULY	34.1	1.1	2.0	1.0	0.27	0.2	77
AUGUST	34.0	1.1	3.0	11.0	0.33	0.3	205
SEPTEMBER	33.4	1.1	4.0	16.0	0.63	0.5	600
OCTOBER	33.5	1.1	2.0	2.0	0.30	0.2	199
NOVEMBER	33.4	1.1	2.0	1.0	0.25	0.6	207
DECEMBER	38.2	1.2					
TOTAL	472.499						
AVERAGE	39.5	1.3	2.5	5.0	0.29	0.3	74