

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

**RIDGETOWN SEWAGE TREATMENT LAGOONS
COMMISSION REPORT 2006**

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 1,537m³/day and peak flow should not exceed 2,990m³/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 2006:

Exceedance of average daily flow limits occurred during the month of February. However, the annual average daily flow was 1,336 m³/day or 86.91%. The lagoons remain within 10 to 15% of flow capacity, as previously indicated in the MOE Inspection Report of 2005. Future replacement of the current facility is being undertaken, to accommodate adequate hydraulic storage and system capacity.

As well, E. coli exceedances occurred during the month of August, and were attributed to two sample results. All other sample results for August were in compliance. The Municipality was required to report to the MOE by June 31, 2006, the steps it intends to take to alleviate the E. coli problem. Measures will include controlling weed growth, to detract the local water fowl population.

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RIDGETOWN SEWAGE TREATMENT LAGOONS
Certificate of Approval # 6818-4RXQY5
Terms and Conditions-Performance**

NON-COMPLIANCE	
Effluent Parameter	Monthly Average Concentration mg/L
CBOD5	10
Total Suspended Solids	10
Total Phosphorous	0.5
Total Ammonia Nitrogen Non Freezing	2
Total Ammonia Nitrogen Freezing	5
Effluent Parameter	Monthly Geometric Mean Density Organisms per 100 mL
E. coli	200

2006 REPORTING PERIOD

Plant Rated Capacity: Average Daily Flow 1.537 1000 m3/day
For 2006: Average Daily Flow 1.336 1000 m3/day
% of Plant Capacity: 87 %

	CBOD5 mg/L	Total S/S mg/L	Total P mg/L	Ammonia mg/L	E coli CFU /100mL
January					
February					
March					
April	2	1.7	0.22	1.7	12
May	2	1	0.26	0.3	11
June	2	1	0.26	0.1	15
July	3.3	5.5	0.43	0.2	109
August	3.3	7.7	0.47	0.5	449
September					
October	2	3	0.21	0.1	188
November	2	2	0.15	0.3	115
December	2	1	0.14	0.4	110
AVERAGE	2.32	2.9	0.27	0.5	126

**AVERAGE DAILY FLOWS
RIDGETOWN SEWAGE TREATMENT LAGOONS**

REPORTING YEAR 2006

MONTH	Avg Daily Flow 1000 m3/day	Percent	Annual %
January	1.388	90	
February	1.540	100.2	
March	1.491	97	
April	1.367	89	
May	1.361	89	
June	1.258	82	
July	1.178	77	
August	1.154	75	
September	1.207	79	
October	1.263	82	
November	1.360	89	
December	1.462	95	
Avg Day Flow 2006	1.336		87%
Total Raw Flow 2006	487.061		