

## **2009 Compliance Report for the Merlin Sewage Lagoons Public Utilities Commission for the Municipality of Chatham-Kent**

The Merlin Sewage Lagoons provide treatment of wastewater for the former Police Village of Merlin. Wastewater is collected by a separate sanitary sewer system and conveyed by one raw pump station to the Sewage Lagoons. The treated wastewater is subsequently discharged to the Cameron Drain.

Approval was received from the Ministry of the Environment in 1975 for construction of sanitary sewers, a force main, a sewage pumping station, and two waste stabilisation ponds.

According to a capacity assessment prepared by R. V. Anderson Associates Limited for the Municipality of Chatham-Kent, average daily flow of sewage into the treatment plant should not exceed 464m<sup>3</sup>/day.

The present treatment system consists of:

- One raw pumping station
- Two waste stabilisation cells
- Two effluent chambers

The effluent chambers discharge to the Foxton Drain.

### **Non-compliance issues in 2009:**

There were no non-compliance issues in 2009.

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The following Ministry Guidelines apply:

Procedure F-5-1: Minimum effluent limits BOD5, Suspended Solids

Procedure F-8: Effluent limits Phosphorus

Procedure F-10-1: Minimum monitoring program

Table C-1: Monitoring, recording and reporting bypasses

<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 P mg/l</b>
<b>Limits: Freezing</b>						
<b>Limits: Non Freezing</b>		<b>464</b>		<b>25</b>	<b>25</b>	<b>1.0</b>
<b>January</b>	7,475	241	52			
<b>February</b>	9,037	323	70			
<b>March</b>	9,494	306	66	2	12	0.08
<b>April</b>	7,908	264	57			
<b>May</b>	6,355	205	44			
<b>June</b>	5,870	196	42			
<b>July</b>	5,248	169	36			
<b>August</b>	5,691	184	40			
<b>September</b>	5,077	169	36			
<b>October</b>	5,831	188	41	2	7	0.87
<b>November</b>	5,506	184	40			
<b>December</b>	6,738	217	47			
	<b>Yearly Total Flow m3</b>	<b>Yearly Averages</b>				
	80,230	221	48	2	10	0.48