

2016 Compliance Report for the Ridgetown Wastewater Treatment Plant Public Utilities Commission for the Municipality of Chatham-Kent

The Ridgetown Wastewater Treatment Plant provides treatment of wastewater for the community of Ridgetown. Wastewater is collected by a separate sanitary sewer system and conveyed by one raw pump station to the Wastewater Treatment Plant. The treated wastewater is subsequently discharged to the Gawne Drain.

The Ridgetown Wastewater Treatment Plant is an Extended Aeration Plant and was commissioned in 2010. The Ridgetown Wastewater Treatment Plant replaces the former Ridgetown Sewage Treatment Lagoons. Replacement of the lagoon system with the mechanical plant was undertaken to accommodate adequate hydraulic storage and system capacity.

According to the Certificate of Approval, average daily flow of sewage into the treatment plant should not exceed 2,347m³/day and peak flow rate should not exceed 4,694m³/day.

The present treatment system consists of:

- Raw sewage pumping
- Packaged inlet plant which includes screening and grit collection/removal
- Chemical phosphorous removal
- pH adjustment
- Anoxic selector cells for nitrification
- Biological treatment using an Extended Aeration Activated Sludge process
- Final settling using secondary clarifiers
- Tertiary treatment provided by continuous backwash sand filter units
- Disinfection of effluent using Ultra Violet irradiation system
- Sludge collection and pumpage
- Aeration bypass and waste activated sludge holding lagoons

The effluent outfall pipe/chamber/channel discharges to the lateral seasonal drain along Mitton Line that subsequently discharges to the Gawne Drain.

C of A # 5194-7FWQNB

Non-compliance issues in 2016:

There were no non-compliance issues.

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Plant Rated Capacity: 2,347m³/day

Total sewage flow to the works during a calendar year divided by the number of days during which sewage was flowing to the works that year

Month	Total Monthly Flow m ³	Avg Daily Flow /Month m ³ /day	Avg Daily Flow /Year m ³ /day	% of Plant Capacity	CBOD ₅ mg/L	Total S.S. mg/L	Total Ammonia mg/L	Total P mg/L	pH	E.Coli /100mL CFU GeoMean
Limits: Receiver ≤ 12°C	None	None	2,347	100			5.0			
Limits: Receiver > 12°C	None	None	2,347	100	10	10	2.0	0.30	6.0 - 9.5	100
Jan	31,539	1,048			2	4	0.050	0.069	7.66	10
Feb	35,001	1,129			2	4	0.053	0.033	7.63	15
Mar	45,046	1,453			2	3	0.053	0.031	7.65	10
Apr	46,407	1,497			2	6	0.059	0.053	7.57	17
May	39,498	1,274			2	3	0.055	0.036	7.61	12
Jun	33,103	1,068			2	3	0.050	0.068	7.22	13
Jul	33,916	1,094			2	2	0.052	0.040	7.25	29
Aug	31,775	1,025			2	2	0.050	0.095	7.04	14
Sept	28,750	927			2	3	0.050	0.081	7.25	37
Oct	30,393	980			2	4	0.051	0.088	7.06	38
Nov	28,492	919			2	2	0.040	0.054	6.83	82
Dec	28,575	922			2	3	0.115	0.056	6.93	24
Year			1,130	48						
	Yearly Total Flow m³	Yearly Maximums								
	412,496	1,497			2	6	0.115	0.095	7.66	82