# August 1, 2008- July 31, 2009 Performance Report for Alvinston Waste Water Treatment Facility

Month	CBOD5 (mg/L)	Suspended Solids (mg/L)	Total Phosphorus (mg/L)	Total Residual Chlorine (mg/L)	E-coli (Cfu/100mL) Geometric mean
Effluent Limits	15	15	1.0	0.50	200
Effluent Objectives	10	10	0.50	0.30	
August	6.5	2	0.12	0.41	60.85
September	2.5	4	0.15	0.42	149.4
October	2	3.7	0.18	0.39	257.65
November	2	6	0.29	0.39	79.11
December	3	7.5	0.18	0.47	61.86
January	2.5	7	0.16	0.40	26.71
February	2.5	7.5	0.18	0.48	20.9
March	2	8.7	0.16	0.43	47.99
April	3.5	5	0.14	0.43	17.36
May	2.5	5.5	0.13	0.36	15.82
June	2	3	0.11	0.50	91.81
July	2	3.5	0.12	0.36	3.07

#### 10 (6) (a) Effluent Monitoring Data Compared to Effluent Limits

#### **Comments:**

- Averages with respect to CBOD5, Suspended Solids, total Phosphorus and TRC conc. were within the effluent limits.
- There was a monthly E-coli Geometric mean average exceedance during the month of October 2008 due to the sodium hypochlorite diffusers starting to clog up. Diffusers were cleaned on Oct. 10<sup>th</sup>/08 but some pump airlocks were also encountered on Oct.17<sup>th</sup> and 18<sup>th</sup>.
- Effluent pH was maintained within 6.0 to 9.5 as stated in section 7 of the C of A.

#### (b) **Operating Problems**

• During the August 2008 to August 2009 reporting period there were no operational problems encountered other then the Oct. 2008 disinfection problems.

#### (c) Maintenance

- Grind Hog unit was replaced with a new unit on March 23, 2009
- Sewage works were taken out of service on July 16<sup>th</sup> 2009 for a clarifier replacement and put back into service on July 22<sup>nd</sup> for testing. Sewage works required shut down again on Aug. 4<sup>th</sup>, 2009 for adjustments and returned to service on Aug. 5<sup>th</sup>, 2009 at ~ 1930 hrs. The Raw sewage was hauled to Plympton for treatment as per MOE request.
- During the reporting period routine monthly maintenance was performed on the diesel generator and annual maintenance was performed on the generator by Albert's Generator Service.
- Six month sludge storage work began on May 25<sup>th</sup>, 2009.
- Chart recorder replaced by R&R Instrumentation with E&H paperless recorder.
- Annual collection flushing and inspection to be completed this fall.

# August 1, 2008- July 31, 2009 Performance Report for Alvinston Waste Water Treatment Facility

### (d) Effluent Quality Assurance

• Effluent quality assurance and control measures undertaken in the reporting period were to increase sampling with regards to in house labs and also in making proper adjustments to process equipment when needed.

### (e) Calibration and Maintenance

• Annual effluent flow meter calibration was completed by R & R Instrumentation.

### (f) Effluent Objectives

- Increased in house labs and monitoring of all process equipment has helped in meeting the effluent objectives.
- The Objective to meet 0.3 mg/L total chlorine residual was not accomplished due to the fact that the ecoli levels would increase bringing that parameter out of compliance.
- The rated capacity of 600 m<sup>3</sup>/day was for the most part within this guideline with the exception of periods of high storm flows or winter ice melt.

### (g) Sludge

- The volume of sludge generated during the reporting period was 450.0 m<sup>3</sup>.
- Approximately 468 m<sup>3</sup> is anticipated to be generated during the next reporting period with 18 m<sup>3</sup> of sludge being hauled every two weeks.
- Sludge is hauled by Stewart Saul Enterprises Limited and is taken to their waste disposal site located at 4033 Aberarder Line in Plympton Township.

## (h) Complaints

• There were no complaints received during this reporting period.

### (i) **By-pass**

• During the reporting period no by-pass, spill or abnormal event occurred.