

**Municipality of Trent Hills  
Staff Report**

<b>Dept. Report No.</b>	<b>To: Council</b>	<b>Prepared by: John C. Seguire</b>
<b>Subject: ANNUAL SUMMARY REPORT FOR THE HASTINGS WASTEWATER TREATMENT FACILITY – 2009</b>		<b>Date: April 14, 2010</b>

**BACKGROUND:**

Condition 10(6) of Certificate of Approval No. 4727-76HSFR states, “*The owner shall prepare and submit to the District Manager a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon...*” The purpose of this report is to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in the Certificate of Approval. On March 15, 2010 the annual performance report was submitted to the MOE and the Municipality of Trent Hills.

At the request of the Municipality of Trent Hills, the following summary report has been prepared. Please note that this summary report does not fulfill the requirements of the performance report required by the Certificate of Approval but rather has summarized the highlights of the performance report and is intended for distribution to council, not the MOE.

**RECOMMENDATION:**

That the Council of the Municipality of Trent Hills acknowledges receipt of the Annual Summary Report for the Hastings Wastewater Treatment Facility - 2009. That Council also acknowledges receipt of the Annual Performance Report for the Hastings Wastewater Treatment Facility – 2009 previously submitted.

**RATIONALE:**

Council should be aware of the performance of the wastewater treatment facility.

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John C. Seguire,  
Cluster Manager, OCWA

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Richard Bolduc,  
Director of Public Works

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Mike Rutter,  
CAO



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

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**Annual Summary Report**  
**for the**  
**Hastings Wastewater Treatment Facility**  
**for the year**  
**2009**

prepared for the Municipality of Trent Hills  
by the Ontario Clean Water Agency

## **Compliance Summary with Certificate of Approval Requirements**

The Hastings Wastewater Treatment Facility (WWTF) operated both adequately and successfully with respect to operation of the wastewater treatment process. There were no difficulties with respect to maintaining compliance with the Certificate of Approval (CofA) effluent quality requirements.

Effluent quantity and quality criteria stipulated in CofA Conditions 7(1) through 7(6) are summarized as follows;

<b>Hastings WWTF - Effluent Non-compliance Limits - 2009 (per CofA No. 4727-76HSFR, Condition 7(1) to 7(3))</b>					
<b>Effluent Parameter</b>	<b>CofA Maximum Concentration</b>	<b>Actual Annual Average Concentration</b>	<b>CofA Maximum Annual Loading</b>	<b>Actual Annual Average Loading</b>	<b>Definition of Concentration Non-compliance</b>
CBOD <sub>5</sub>	25.0 mg/L	<2.8	26.5 kg/d	<1.6	non-compliance occurs when annual average exceeds the maximum concentration value
Total Suspended Solids	25.0 mg/L	4.7	26.5 kg/d	2.82	non-compliance occurs when annual average exceeds the maximum concentration value
Total Phosphorus	1.0 mg/L	Max. Monthly = 0.40	1.1 kg/d	0.09	non-compliance occurs when the monthly average exceeds the maximum concentration value
pH	6.0 to 9.5	6.8 to 7.9	n/a	n/a	non-compliance occurs when the effluent pH falls outside this range.
FOOTNOTE: Condition 7(2)(c) of CofA No. 4727-76HSFR - Non-compliance with respect to loadings is deemed to have occurred when the annual average loading of a parameter named in Column 1 of subsection (1) exceeds the corresponding maximum waste loading value set out in Column 3 of subsection (1).					

The results tabulated above show that there were no effluent non-compliance events in accordance with the Certificate of Approval for the 2009 reporting period.

## **Operations and Maintenance Summary**

There were no operational issues encountered during the 2009 reporting period.

### Flow Data:

The following table provides a comparison of the rated capacity of the works to the actual flow data obtained during the 2009 reporting period.

**Hastings WWTF - Effluent Objectives  
Flow Data for 2008  
(per CofA No. 4727-76HSFR, Condition 6(3)(b))**

<b>Month</b>	<b>Avg. Daily Flow (m<sup>3</sup>)</b>	<b>CofA Rated Capacity (m<sup>3</sup>)</b>
<b>January</b>	579.4	1,060
<b>February</b>	625.1	1,060
<b>March</b>	699.3	1,060
<b>April</b>	1,010.3	1,060
<b>May</b>	752.1	1,060
<b>June</b>	532.3	1,060
<b>July</b>	375.2	1,060
<b>August</b>	323.6	1,060
<b>September</b>	295.2	1,060
<b>October</b>	362.8	1,060
<b>November</b>	397.8	1,060
<b>December</b>	576.3	1,060

The above table shows that the Hastings WWTF CofA rated capacity was not exceeded during the 2009 reporting period.

Maintenance:

Maintenance activities at the Hastings WWTF are based on a computerized Work Management System (WMS) using the Hansen application. Each piece of equipment at the operating facility has been tagged with a unique bar code number, and this information has been entered into the electronic WMS database. Preventative maintenance procedures and schedules have been developed for each piece of equipment. Each work order generated by the Preventative Maintenance schedule includes materials and parts required, any special tool requirements, work protection, job safety planning, running checks, a preventive maintenance job procedure, and upon completion of the task, a work order close out.

Corrective or breakdown maintenance is required when equipment is determined to be non-serviceable, or the potential for non-serviceability exists. All preventive and corrective/breakdown maintenance is executed and accounted for under a Hansen work order.

The WMS database populates work orders and schedules for the calibration and maintenance of a wide variety of equipment. These work orders are generated on a daily, weekly, monthly, quarterly, semi-annual or annual basis - depending upon the type of procedure being undertaken. The WMS also automatically tracks each individual maintenance event, calibration of all meters, and certification of all devices.

During the 2009 reporting period over 700 work orders were issued and completed at the Hastings WWTF, the Main, North and Homewood Avenue pumping stations.

Biosolids Summary:

During the 2009 reporting period, 523.4 m<sup>3</sup> of sludge was hauled and disposed from the Hastings Wastewater Treatment Facility.

The final biosolids disposal method used for the solids produced in the Hastings Wastewater Treatment process is agricultural land application.

Each site that receives biosolids must be certified with the local district office of the Ministry of the Environment. All biosolids disposed of from February to March 2009 were taken to a certified holding lagoon (Johnson's Haulage), certification Number A311714. During November 2009, all biosolids were applied to agricultural land, Site No. S-3405-50 and S-3405-51.

Community Complaints:

There were no complaints received during the 2009 reporting period.

Bypass, Spill or Abnormal Discharges:

There were no by-pass, spills or abnormal discharge events during the 2009 reporting period.