

# Tweed Wastewater Lagoon

## Annual Report

Reporting period of January 1, 2018 – December 31, 2018

Prepared For: Municipality of Tweed

Prepared By:



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

This report is submitted in accordance with Conditions 10(5)(a) through 10(5)(l) of Environmental Compliance Approval No. # 9608-9ZLJ2E.

Condition 10(5) of Environmental Compliance Approval No. # 9608-9ZLJ2E states, *“The Owner shall prepare and submit a performance report to the Water Supervisor on an annual basis, within ninety (90) days following the end of the period being reported upon...”*

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ECA CONDITION 10(5)(A) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 6, including an overview of the success and adequacy of the Works;

Condition 6 is imposed to ensure that the effluent discharged from the Works to Moira Creek and there from to Stoco Lake meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality, fish and other aquatic life in the receiving water body.

A summary of all monitoring data collected at the Tweed Lagoons during the reporting period is attached as Appendix I. The summary provides flow data, and analytical results of raw sewage, final effluent and upstream and downstream results.

Effluent limits are stipulated in Condition 6(1) as follows:

Tweed Lagoons – Seasonal Average Effluent Limits	
Effluent Parameter	Average Concentration (mg/L)
CBOD5	25.0
Total Suspended Solids	25.0
Total Phosphorus	1.0
pH of the effluent maintained between 6.0 and 9.5, inclusive, at all times	

Effluent non-compliance is based on the seasonal average concentration, calculated separately for the effluent from each lagoon, exceeding the maximum concentration specified.

Discharge periods are defined in Condition 9(1) as follows:

- Spring discharge commencing not earlier than March 15 and after the liquid surface in the lagoon has become free of ice cover, terminating within 45 days thereafter, and no later than May 7, and
- Fall discharge commencing not earlier than November 1 and terminating not later than December 7

### 2018 Spring Lagoon Discharge

The 2018 Spring Lagoon discharged commenced under the cover of ice on March 20<sup>th</sup> and was terminated on May 2<sup>nd</sup>. The lagoon was free from ice cover on April 11<sup>th</sup> and MECP was notified. The Ministry of the Environment, Conservation and Parks was verbally notified prior to commencement of the discharge and once the discharge ended. A total effluent volume of 180,068m<sup>3</sup> was discharged. No community complaints received for the entire duration of the discharge.

2018 Spring Cell Contents (Pre-discharge)			
01-March-18	CBOD (mg/L)	TSS (mg/L)	Total P (mg/L)
South Lagoon Cell Contents	25.00	25.00	0.31
North Lagoon Cell Contents	8.00	6.00	0.20

As per Section 9(3) of the Environmental Compliance Approval (ECA) (5) sampling events during the discharge shall be collected for effluent monitoring including CBOD5, Total Suspended Solids, Total Ammonia Nitrogen, Hydrogen Sulphide, pH, Temperature, and E.Coli. During ice cover the MECP requested enhanced weekly monitoring of the effluent including: 4N, un-ionized ammonia, dissolved oxygen, conductivity, and fecal coliform in addition to regular effluent monitoring samples set out in section 9(3) of the ECA. One toxicity sample should be completed during the start of each discharge period and weekly during ice cover.

Tweed Combined (Outfall) Lagoon Spring Discharge "Provincial Officer's Order 1-EYMK2"	# of grab samples taken	Range of Results (min # - max #)	Seasonal Average Limits	Compliant Y/N
CBOD5	7	Seasonal Average = 9.5 mg/L	25 mg/L	Y
Total Suspended Solids	7	Seasonal Average = 11.1 mg/L	25 mg/L	Y
Total Phosphorus	7	Seasonal Average = 0.09 mg/L	1.00 mg/l	Y
Field pH		7.20 – 7.60	6.0-9.50	Y
Dissolved Oxygen	7	4.3 – 7.7 mg/L	No Limit	Not Applicable
Ammonia + Ammonium	7	2.90 – 10.0mg/L	No Limit	Not Applicable
Unionized Ammonia	7	0.016 – 0.038 mg/L as N	No Limit	Not Applicable
Conductivity	7	890 – 1215 umhos/cm	No Limit	Not Applicable
Fecal Coliform	7	58 – 11000 cfu/100ml	No Limit	Not Applicable
Temperature	7	4.30– 15.30 °C	No Limit	Not Applicable
Total Ammonia Nitrogen (TAN)	7	4.60 – 10.0 mg/L	No Limit	Not Applicable
H <sub>2</sub> S	7	<0.02 - <0.02 mg/L	No Limit	Not Applicable
E.coli	7	20- 10600 cfu/100ml	No Limit	Not Applicable
Toxicity - Daphnia Magna	3	0% Mean Mortality	No Limit	Not Applicable
Toxicity – Rainbow Trout	3	0% Mean Mortality	No Limit	Not Applicable

### 2018 Fall Lagoon Discharge

The 2018 fall discharge commenced on November 1<sup>st</sup> and terminated on November 28<sup>th</sup>. A total effluent volume of 136,164 m<sup>3</sup> was discharged over the 31 day discharge period. The Ministry of the Environment, Conservation and Parks was notified via email prior to commencement of the discharge and on the day the discharge ended.

2018 Fall Cell Contents (Pre-discharge)			
10-Oct-18	CBOD (mg/L)	TSS (mg/L)	Total P (mg/L)
South Lagoon Cell Contents	<4.00	2.00	0.04
North Lagoon Cell Contents	13.00	21.00	0.10



All analytical effluent concentration results were below the maximum acceptable concentrations as specified in the facilities Certificate of Approval. A summary of the discharge data is below.

Tweed Combined (Outfall) Lagoon Fall Discharge	# of grab samples taken	Range of Results (min # - max #)	Seasonal Average Limits	Compliant Y/N
CBOD5	5	Seasonal Average = 2.00 mg/L	25 mg/L	Y
Total Suspended Solids	6	Seasonal Average = 2.00 mg/L	25 mg/L	Y
Total Phosphorus	6	Seasonal Average = 0.04 mg/L	1.00 mg/l	Y
pH	6	7.20 – 7.90	6.0-9.50	Y
Temperature	5	1.70– 10.10 °C	No Limit	Not Applicable
Total Ammonia Nitrogen (TAN)	6	0.1 – 3.90 mg/L	No Limit	Not Applicable
H <sub>2</sub> S	6	<0.02 - <0.02 mg/L	No Limit	Not Applicable
E.coli	6	154 - 6560 cfu/100ml	No Limit	Not Applicable
Toxicity - Daphnia Magna	1	0% Mean Mortality	No Limit	Not Applicable
Toxicity – Rainbow Trout	1	0% Mean Mortality	No Limit	Not Applicable

The lagoons operated both adequately and successfully with respect to operation of the wastewater treatment process. There were no exceedances with respect to effluent concentration during the 2018 reporting period.

ECA CONDITION 10(5)(B) a description of any operating problems encountered and corrective actions taken;

The following is a description of significant operating problems which occurred during 2018, and corrective actions taken.

#### 2018 Tweed WSP Operational Challenges

MONTH	CHALLENGES	CORRECTIVE ACTIONS
March	Spring Lagoon Discharge under ice cover	OCWA & Municipality received approval from MOECC under POO# 1EYMK2 to discharge under the cover of ice.
April	One (1) River St Sewage Pumping Station Bypass Event due to heavy rainfall	Chlorine Pucks were added to the bypass to maintain adequate disinfection.
	One (1) Jamieson Street Sewage Pumping Station Bypass Event due to heavy rainfall	Chlorine Pucks were added to the bypass to maintain adequate disinfection.

ECA CONDITION 10(5)(C) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;

OCWA uses a risk-based preventative maintenance framework that ensures assets are maintained to manufacturer's and/or industry standards. Maintenance is completed using various tools and operational supports

OCWA uses a Workplace Maintenance System (WMS). WMS is a maintenance tracking system that can generate work orders as well as give summaries of completed and scheduled work. During the year, the operating authority at the facility generates scheduled work orders on a weekly, monthly, quarterly and annual basis. The service work is recorded in the work order history. This ensures routine and preventive maintenance is carried out.

Preventative Maintenance/Weekly Work Orders Completed	42
Operational Maintenance Work Orders Completed	16
Capital Maintenance Work Orders Completed	3

Capital projects are listed and provided to the Municipality of Tweed in the form of a "Capital Forecast". This list is developed by facility staff and provides recommendations for facility components requiring upgrading or improvement. Annual and Emergency repair/maintenance is listed below:

- Heater Replacement
- Annual Diesel Inspection
- Annual Wet Well Clean-outs
- Additional toxicity sampling for daphnia magna & rainbow trout

ECA CONDITION 10(5)(D) a summary of any effluent quality assurance or control measures undertaken in the reporting period;

Effluent control measures include in-house sampling and testing for operational parameters such as suspended solids, pH, soluble phosphorus, and dissolved oxygen. In-house testing provides real time results which are then used to enhance process and operational performance. All in-house sampling and analysis are performed by certified operations staff utilizing approved methods and protocols for sampling, analysis and recording as specified in the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works", the Ministry's publication, "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" and the publication, "Standard Methods for the Examination of Water and Wastewater".

All final effluent samples collected during the reporting period to meet ECA sampling requirements were submitted to SGS Lakefield Research Ltd. laboratory for analysis, with the exception of in-house lagoon quality monitoring. SGS Lakefield Research has been deemed accredited by the Canadian Association of Environmental and Analytical Laboratories (C.A.E.A.L.), meeting strict provincial guidelines including an extensive quality assurance/quality control program. By choosing this laboratory, the Ontario Clean Water Agency is ensuring appropriate control measures are undertaken during sample analysis.



ECA CONDITION 10(5)(E) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;

As stated earlier, the Ontario Clean Water Agency's maintenance activities are based on a computerized Work Management System (WMS) using the Maximo application. The WMS is a proactive maintenance system, based on detailed risk assessment with respect to process.

The WMS database automatically populates work orders and schedules for the calibration and maintenance of a wide variety of equipment. The WMS also automatically tracks each individual maintenance event, calibration of all meters and certification of all devices.

Calibration and maintenance of the onsite flow measuring devices are calibrated by a certified third party qualified technician and performed on annual basis.

Flow meter and Chart Recorder

Calibration Date: May 30, 2018

Work Performed By: Flowmetrix Technical Services Inc.

ECA CONDITION 10(5)(F) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 5.

Condition 5 - Effluent Objectives, states "The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works."

<b>EFFORTS MADE TO MEET THE EFFLUENT OBJECTIVES OF CONDITION 5</b>
1. Sampling effluent as per ECA.
2. Visually inspecting effluent when performing rounds during spring/fall discharge
3. Ensuring that alum is being dosed
4. Ensuring proper operation of River and Jamison Street Pump Stations
5. Perform inspection of lagoon quality during operation
6. Collected lagoon PH, temp, D.O, and conductivity during discharges
7. Calibrating pH/DO probes during spring/fall discharge.
8. Annual calibration of influent flow meter.

Tabulated below is a summary of the ECA effluent objectives, specified in Condition 5(1), in comparison to the actual effluent results obtained during the reporting period.

Tweed Lagoons - Effluent Objectives - 2018 (per ECA No. 9608-9ZLJ2E , Condition 5(1) & (2(a))			
Effluent Parameter	ECA Effluent Objective Concentration	Actual Spring Discharge Average Concentration – Outfall	Actual Fall Discharge Average Concentration - Outfall
CBOD <sub>5</sub>	20 mg/L	9.50	2.0
Suspended Solids	20 mg/L	11.1	2.0
Total Phosphorus	0.8 mg/L	0.09	0.04
pH	Min: 6.50 Max: 8.50	Min: 7.20 Max: 7.60	Min: 7.20 Max: 7.90

The following table provides a comparison of the rated capacity of the works to the actual flow data obtained during the 2018 reporting period.

Tweed Lagoons – Influent Capacity Flow Data for 2018 (per ECA No. 9608-9ZLJ2E , Condition 5(2)(b))		
Month	Avg. Daily Flow (m <sup>3</sup> )	ECA Rated Capacity (m <sup>3</sup> )
January	1,027	1,209
February	1,096	1,209
March	1,105	1,209
April	1,989	1,209
May	1,174	1,209
June	717	1,209
July	576	1,209
August	551	1,209
September	546	1,209
October	546	1,209
November	681	1,209
December	836	1,209

The above table shows that the Tweed Influent rated capacity was exceeded during the month of April. The high flows were attributed to the significant amount of rainfall throughout the reporting period. Although the rated capacity was exceeded the effluent quality remained well below the effluent concentration requirements as outlined on page 4 of this report.

The Ontario Clean Water Agency, on behalf of the owner, did use best efforts to ensure that the effluent was essentially free of floating and settleable solids and that it did not contain oil or any other substance in amounts sufficient to create a visible film, sheen, foam or discoloration on the receiving waters in accordance with this **objective**.



ECA CONDITION 10(5)(G) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed.

There was no generation of sludge for the reporting period. It is anticipated that the volume for the next reporting period will be similar to the 2019 reporting period.

Tweed WWTF		
Year	Total Raw Sewage Flow (m <sup>3</sup> )	Volume of Sludge Hauled (m <sup>3</sup> )
2008	418,081	12,880
2009	502,948	0.00
2010	381,500	0.00
2011	407,431	0.00
2012	313,693	0.00
2013	357,607	0.00
2014	421,576	0.00
2015	341,988	0.00
2016	339,399	0.00
2017	419,644	0.00
2018	328,939	0.00

ECA CONDITION 10(5)(H) a summary of any complaints received during the reporting period and any steps taken to address the complaints;

There were no Community Complaints received for the 2018 reporting period

ECA CONDITION 10(5)(I) a summary of all By-pass, spill or abnormal discharge events;

Summarized below are the bypass and overflow events that occurred in the 2018 reporting period, specific details regarding each event will be provided in Appendix III of this report.

Summary of Bypass and Overflow Events - 2018									
Date 2018	Location	Type of Event	Start Time (24hr)	End Time (24hr)	Duration (hrs)	Total Volume (m3)	Disinfect (Y/N)	Samples Collected (Y/N)	Reason
April 16 - 21, 2018	River St SPS	Bypass	14:35 (April 16)	01:30 (April 21)	107hrs 25min	2,917	Y	Y	Heavy Rainfall
April 16- 20, 2018	Jamieson St SPS	Bypass	14:55 (April 16)	10:00 (April 20)	91hrs 45min	917	Y	Y	Heavy Rainfall

ECA CONDITION 10(5)(J) *A copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification.*

There was no "Notice of Modifications" submitted to the Water Supervisor for the year 2018.

ECA CONDITION 10(5)(K) *a report summarizing all modifications completed as a result of Schedule B, Section 3:*

As per Schedule B, Section 3, a repair is considered a normal or emergency operational modification, that does not require Notice of Modification; is defined as *"Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved"*.

There were no modifications completed as a result of Schedule B Section 3 for the year 2018



ECA CONDITION 10(5)(L) any other information the Water Supervisor requires from time to time.

The Water Supervisor has not requested any other information to be included in this report at this time

### Wastewater System Effluent Regulations

The Wastewater Systems Effluent Regulations (WSER) is a federal wastewater regulation under the Fisheries Act that was released in July 2012 but not in effect until January 1, 2013.

These regulations apply to a wastewater system that:

- Is designed to collect an average daily volume (ADV) of 100m<sup>3</sup> or more of influent, or
- Collects an average daily volume (ADV) of 100m<sup>3</sup> or more of influent during any calendar year.

An owner or operator must calculate, for each calendar year, the Average Daily Volume of effluent deposited via the system's final discharge point according to the following formula:

$$\text{Sum of daily effluent volumes deposited (m}^3\text{)} \div \text{number of days in that calendar year (365 days)}$$

**Note:** The formula uses the number of days in the calendar year not the number of days discharging.

Sampling and reporting requirements are dependent on the system type and its annual average daily volume of effluent. In 2018 The Tweed Wastewater Treatment Lagoon deposited approximately 1172.0 m<sup>3</sup> of daily effluent volumes.

The Annual Monitoring Report (due by February 14 each year) was submitted to Environment Canada in February 2019. The Tweed Lagoon met all of the quality standards in 2018.

<u>Monitoring Report</u>			
<b>Effluent Monitoring Data:</b>	<u>Tweed Wastewater Treatment Lagoon</u>		
<b>System Type:</b> Intermittent	<b>Reporting Period:</b> Annually	<b>Avg Daily Effluent:</b> 1172.0	
<b>Averaging Period:</b> Annually	<b>Reporting Period:</b> January - December	<b>Reporting Year:</b> 2018	
Was effluent deposited in this reporting period? Yes			
For each month indicated, was effluent deposited?			
January:	No	February:	No
April:	Yes	May:	Yes
July:	No	August:	No
October:	No	November:	Yes
		March:	Yes
		June:	No
		September:	No
		December:	No

  

# of days effluent was deposited? (days)	Total Volume of Effluent deposited? (m <sup>3</sup> )	Average CBOD (mg/L)	Average SS (mg/L)
		Limits	
		25	25
77	318,016	7.6	9.5

**Appendix I**  
**Performance Reports for**  
**the**  
**Tweed Lagoons**  
**2018**





**Appendix II**

**Provincial Officer Order for 2018 Spring Discharge  
(Provincial Officer's Order 1-EYMK2)  
2018**



## Provincial Officer's Report

Order Number  
1-EYMK2

**To:**  
THE CORPORATION OF THE MUNICIPALITY OF TWEED  
255 METCALF St , POSTAL BAG 729  
TWEED ON K0K 3J0  
Canada

**Site:**  
TWEED SEWAGE LAGOONS  
LOT 12-13, CONCESSION 10  
TWEED, COUNT OF HASTINGS

In an email sent to the Ministry of the Environment and Climate Change, Safe Drinking Water Branch, Provincial Officer/Water Inspector - Monica Howlett on March 8, 2017, from Amber Bevan - Operations Manager of the Ontario Clean Water Agency (OCWA) - Deloro Cluster, (Operating Authority) for the Tweed Lagoon Sewage Treatment System she is requesting Ministry of the Environment and Climate Change's approval to discharge the Tweed lagoons premature to avoid a potential spill/overflow of the lagoons & to coincide with the spring freshet. It is understood that Environmental Compliance Approval # 9608-9ZLJ2E, Condition 8 - Special Operations - Seasonal Discharge, stipulates that the "spring discharge" is to commence not earlier than March 15 after the liquid surface in the lagoon has become substantially free of ice and terminating not later than May 7 and using reasonable efforts to maximize the discharge rate to coincide with the spring freshet and elevated flows in the receiver. OCWA advises that at present, both lagoon cells are ice covered and the Moira river flows are elevated. Delaying the commencement of the 2017 spring discharge period until March 15 may expose the system to the potential of a lagoon berm failure and/or a spill. Given the above cited potential for contravention of Condition #8, and the consideration to minimize the impacts on the environment, I am of the opinion that it is necessary to commence with the 2017 Spring discharge "as soon as possible" to accomplish a total discharge volume of approximately ~233,856 m3 of final effluent, accompanied by enhanced final effluent sampling and reporting, as outlined in Provincial Officers Order # 1-EYMK2 , Item #2, while ensuring that all reasonable efforts are made to ensure that the discharge coincides with spring freshet and elevated spring flows within the Moira river.

**Offence(s)**

**Suspected Violation(s)/Offence(s)**

**Act – Regulation – Section**

**Description**



Monica Howlett  
Provincial Officer  
Badge Number: 1261

**Appendix III**  
**Summary of Bypass and Overflow Events**  
**2018**





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

www.ocwa.com

Trent Valley Hub  
131 St. Paul Street  
PO Box 20157  
Belleville, Ontario  
K8N 5V1  
Tel: (613) 962-5454  
Fax: (613) 962-1966

April 17, 2018

Monica Howlett  
Provincial Officer/Water Inspector  
Drinking Water Management Division  
Ministry of the Environment and Climate Change  
Belleville Area Office  
345 College Street East  
Belleville, ON K8N 5S7

Dear Ms. Howlett:

**Re: Tweed Sewage Lagoon 2018 Q1 Bypass and Plant Overflow Event Report**

Amended Environmental Compliance Approval #9608-9ZLJ2E Section 4(3) issued September 22, 2015 for the Tweed Sewage Lagoon requires a quarterly *Bypass and Plant Overflow Events Report* be submitted to the Water Supervisor, no later than February 14, May 15, August 14, and November 15 each calendar year.

The report shall include, at a minimum, the following information on any Bypass/Plant Overflow Event that occurred during the preceding quarter:

- the Date of the Event(s):
- the measured or estimated volume of the Event(s):
- the duration of the Event(s):
- the location of the Event(s):
- the reason for the Event(s): and
- the level of treatment the bypass(es) and/or Plant Overflow(s) received and disinfection status of same.



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

[www.ocwa.com](http://www.ocwa.com)

The following tables provide the required information from January 1, 2018 to March 31, 2018, in accordance with terms and conditions of Environmental Compliance Approval (ECA) #9608-9ZLJ2E, Item 4(3):

There were not events to be reported for the Tweed Lagoons during this reporting period.

Best regards,

A handwritten signature in black ink, appearing to read 'Jessica Cronkright'.

Jessica Cronkright  
Process & Compliance Technician (A)  
Ontario Clean Water Agency  
Trent Valley  
(613) 962-5656 ext. 23

CC: Betty Gallagher, CAO/Clerk-Treasurer, Municipality of Tweed  
Cindy Spencer, Regional Hub Manager, OCWA  
Amber Bevan, Senior Operations Manager, OCWA  
Wesley Henneberry, SPC Manager, OCWA





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

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August 9, 2018

Monica Howlett  
Provincial Officer/Water Inspector  
Drinking Water Management Division  
Ministry of the Environment, Conservation and Parks  
Belleville Area Office  
345 College Street East  
Belleville, ON K8N 5S7

Dear Ms. Howlett:

**Re: Tweed Sewage Lagoon 2018 Q2 Bypass and Plant Overflow Event Report**

Amended Environmental Compliance Approval #9608-9ZLJ2E Section 4(3) issued September 22, 2015 for the Tweed Sewage Lagoon requires a quarterly *Bypass and Plant Overflow Events Report* be submitted to the Water Supervisor, no later than February 14, May 15, August 14, and November 15 each calendar year.

The report shall include, at a minimum, the following information on any Bypass/Plant Overflow Event that occurred during the preceding quarter:

- the Date of the Event(s):
- the measured or estimated volume of the Event(s):
- the duration of the Event(s):
- the location of the Event(s):
- the reason for the Event(s): and
- the level of treatment the bypass(es) and/or Plant Overflow(s) received and disinfection status of same.



The following tables provide the required information from April 1, 2018 to June 30, 2018, in accordance with terms and conditions of Environmental Compliance Approval (ECA) #9608-9ZLJ2E, Item 4(3):

Event #	Start		Finish		Total Hours (hh:mm)	Total Volume (m <sup>3</sup> )	Samples Collected	Reason/Cause	MOECC Notified	Incident #	Level of Treatment during Bypass	Location (PCP or SPS)
	Date	Time	Date	Time								
1	16-April-2018	14:35 PM	21-April-2018	01:30 AM	107:25	2,917	Yes	Precipitation	Yes	902116	Chlorination pucks added to the bypass to maintain adequate disinfection	River St (SPS)
2	16-April-2018	14:55 PM	20-April-2018	10:00 AM	91:45	917	Yes	Precipitation	Yes	902116	Chlorination pucks added to the bypass to maintain adequate disinfection	Jamieson St (SPS)

Best regards,

Jessica Cronkright  
 Process & Compliance Technician  
 Ontario Clean Water Agency  
 Trent Valley  
 (613) 962-5656 ext. 23

CC: Betty Gallagher, CAO/Clerk-Treasurer, Municipality of Tweed  
 Cindy Spencer, Regional Hub Manager, OCWA  
 Amber Bevan, Senior Operations Manager, OCWA  
 Wesley Henneberry, SPC Manager, OCWA



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

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October 31, 2018

Monica Howlett  
Provincial Officer/Water Inspector  
Drinking Water Management Division  
Ministry of the Environment, Conservation and Parks  
Belleville Area Office  
345 College Street East  
Belleville, ON K8N 5S7

Dear Ms. Howlett:

**Re: Tweed Sewage Lagoon 2018 Q3 Bypass and Plant Overflow Event Report**

Amended Environmental Compliance Approval #9608-9ZLJ2E Section 4(3) issued September 22, 2015 for the Tweed Sewage Lagoon requires a quarterly *Bypass and Plant Overflow Events Report* be submitted to the Water Supervisor, no later than February 14, May 15, August 14, and November 15 each calendar year.

The report shall include, at a minimum, the following information on any Bypass/Plant Overflow Event that occurred during the preceding quarter:

- the Date of the Event(s):
- the measured or estimated volume of the Event(s):
- the duration of the Event(s):
- the location of the Event(s):
- the reason for the Event(s): and
- the level of treatment the bypass(es) and/or Plant Overflow(s) received and disinfection status of same.





The following tables provide the required information from July 1, 2018 to September 30, 2018, in accordance with terms and conditions of Environmental Compliance Approval (ECA) #9608-9ZLJ2E, Item 4(3):

Event #	Start		Finish		Total Hours (hh:mm)	Total Volume (m <sup>3</sup> )	Samples Collected	Reason/Cause	MOECC Notified	Incident #	Level of Treatment during Bypass	Location (PCP or SPS)
	Date	Time	Date	Time								
No bypass or overflow events to report for the 3 <sup>rd</sup> quarter												

Best regards,

Jessica Cronkright  
 Process & Compliance Technician  
 Ontario Clean Water Agency  
 Trent Valley  
 (613) 962-5656 ext. 23

CC: Betty Gallagher, CAO/Clerk-Treasurer, Municipality of Tweed  
 Cindy Spencer, Regional Hub Manager, OCWA  
 Amber Bevan, Senior Operations Manager, OCWA  
 Wesley Henneberry, SPC Manager, OCWA



Trent Valley Hub  
131 St. Paul Street  
PO Box 20157  
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K8N 5V1  
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February 11, 2019

Monica Howlett  
Provincial Officer/Water Inspector  
Drinking Water Management Division  
Ministry of the Environment, Conservation and Parks  
Belleville Area Office  
345 College Street East  
Belleville, ON K8N 5S7

Dear Ms. Howlett:

**Re: Tweed Sewage Lagoon 2018 Q4 Bypass and Plant Overflow Event Report**

Amended Environmental Compliance Approval #9608-9ZLJ2E Section 4(3) issued September 22, 2015 for the Tweed Sewage Lagoon requires a quarterly *Bypass and Plant Overflow Events Report* be submitted to the Water Supervisor, no later than February 14, May 15, August 14, and November 15 each calendar year.

The report shall include, at a minimum, the following information on any Bypass/Plant Overflow Event that occurred during the preceding quarter:

- the Date of the Event(s):
- the measured or estimated volume of the Event(s):
- the duration of the Event(s):
- the location of the Event(s):
- the reason for the Event(s): and
- the level of treatment the bypass(es) and/or Plant Overflow(s) received and disinfection status of same.



The following tables provide the required information from October 1, 2018 to December 31, 2018, in accordance with terms and conditions of Environmental Compliance Approval (ECA) #9608-9ZLJ2E, Item 4(3):

Event #	Start		Finish		Total Hours (hh:mm)	Total Volume (m <sup>3</sup> )	Samples Collected	Reason/Cause	MECP Notified	Incident #	Level of Treatment during Bypass	Location (PCP or SPS)
	Date	Time	Date	Time								
No bypass or overflow events to report for the 4 <sup>th</sup> quarter												

Best regards,

Jessica Cronkright  
Process & Compliance Technician  
Ontario Clean Water Agency  
Trent Valley  
(613) 962-5656 ext. 23

CC: Betty Gallagher, CAO/Clerk-Treasurer, Municipality of Tweed  
Cindy Spencer, Regional Hub Manager, OCWA  
Amber Bevan, Senior Operations Manager, OCWA  
Wesley Henneberry, SPC Manager, OCWA