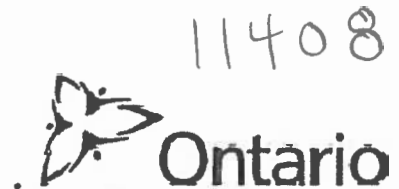


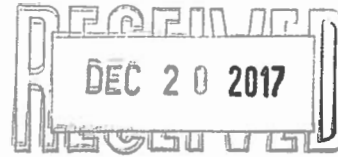
Ministry
of the Environment
and Climate Change

Ministère
de l'Environnement et de l'Action
en matière de changement climatique



Sector Compliance Branch
305 Milner Ave, Suite 1000
Scarborough, ON M1B 3V4
Tel.: 416-314-4278
Fax.: 416-314-4464

Direction de la mise en conformité des secteurs
305, avenue Milner, bureau 1000
Scarborough, ON M1B 3V4
Tél.: 416-314-4278
Télé.: 416-314-4464



File ☒ Incoming ☐ Other
Mayor ☐
Council ☒ ~~EA~~
CAO ☐
Building ☐
Finance ☐ S ☐ C
Ec Dev ☐ S ☐ C
Parks & Rec ☐ S ☐ C
Planning ☐ S ☐ C
Public Wks ☒ S ☐ C
PPP ☐
Social Services ☐
☐ _____
☐ _____

December 20, 2017

The Corporation of the Municipality of Temagami
7 Lakeshore Drive
Temagami, ON
POH 2H0

Attn: Barry Turcotte

Re: Temagami South WPCP Inspection Report

Please find the attached final inspection report for the Temagami South WPCP Inspection that was conducted on August 1, 2017. Please take note of the "Summary of Recommendations and Best Practice Issues" section on Page 10 of the report. This section contains the recommendations that were included in the draft inspection report that was sent for review on December 4, 2017.

Thank you for your assistance in conducting the inspection report. Please contact me if you have any questions or concerns regarding the inspection report.

Sincerely,



Scott Steeves
Sr. Environmental Officer # 1605

Attachments:



Ministry of the Environment and Climate Change

WW TEMAGAMI SOUTH LAGOON

Inspection Report

Site Number:	110002327
Inspection Number:	1-GL30D
Date of Inspection:	Aug 01, 2017
Inspected By:	Scott Steeves

OWNER INFORMATION:

Company Name:	TEMAGAMI, MUNICIPALITY OF	Unit Identifier:	
Street Number:	7		
Street Name:	LAKESHORE Dr		
City:	TEMAGAMI		
Province:	ON	Postal Code:	P0H 2H0

CONTACT INFORMATION

Type:	Owner	Name:	Patrick Cormier
Phone:	(705) 569-3421	Fax:	(705) 569-2834
Email:	cao@temagami.ca		
Title:	CAO, Municipality of Temagami		
Type:	Owner	Name:	Barry Turcotte
Phone:	(705) 569-3272	Fax:	(705) 569-2834
Email:	publicworks@temagami.ca		
Title:	Superintendent, Public Works, Municipality of Temagami		
Type:	Operating Authority	Name:	Rebecca Marshall
Phone:	(705) 567-3955	Fax:	(705) 567-7974
Email:	rmarshall@ocwa.com		
Title:	Process and Compliance Technician - OCWA		

INSPECTION DETAILS:

Site Name:	WW TEMAGAMI SOUTH LAGOON
Site Address:	22 JACK GUPPY WAY S TEMAGAMI ON P0H 2H0
County/District:	Temagami
MOECC District/Area Office:	North Bay Area Office
Health Unit:	TIMISKAMING HEALTH UNIT
Conservation Authority:	
MNR Office:	
Site Number:	110002327
Inspection Type:	Announced
Inspection Number:	1-GL30D
Date of Inspection:	Aug 01, 2017
Date of Previous Inspection:	Oct 13, 2012

COMPONENTS DESCRIPTION

INSPECTION SUMMARY:

Introduction

- The primary focus of this inspection is to confirm compliance with Ministry of the Environment and Climate Change (MOECC) legislation as well as evaluating conformance with ministry policies and guidelines during the inspection period. This wastewater treatment and collection system is subject to the legislative requirements of the Ontario Water Resources Act (OWRA) and the Environmental Protection Act (EPA) and regulations made therein. This inspection has been conducted pursuant to Section 15 of the OWRA and Section 156 of the EPA. This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

The Temagami South Lagoon is a Class 1 Wastewater Treatment System, located at 22 Jack Guppy Way South, Temagami, Ontario.

The Temagami South Lagoon is owned by the Municipality of Temagami, and is operated by the Ontario Clean Water Agency (OCWA). The facility serves the southern portion of the community of Temagami within the Municipality of Temagami. The Temagami South Lagoon system consists of two equal size facultative sewage lagoon cells with a combined storage capacity of 45,800 m³. The Temagami South Sewage Lagoon discharges semi-annually to Snake Island Lake via a discharge pipe.

The primary focus of this inspection is to confirm compliance with Ministry of the Environment and Climate Change (MOECC) legislation as well as evaluating conformance with ministry policies and guidelines during the inspection period. This wastewater treatment and collection system is subject to the legislative requirements of the Ontario Water Resources Act (OWRA) and the Environmental Protection Act (EPA) and regulations made therein. This inspection has been conducted pursuant to Section 15 of the OWRA and Section 156 of the EPA. This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

Works associated with the Temagami South Sewage Lagoons are approved under the following ECA's: ECA # 1-503-77-006 issued August 23, 1977, ECA # 1-503-77-006, issued on January 13, 1992, ECA # 3-0653-93-006 issued on September 3, 1993, and ECA # 3-1567-98-006, issued on November 3, 1998.

The inspection at the facility was conducted on August 2, 2017. The site inspection consisted of a physical site tour of the facility, a review of relevant documents from the period of January 1, 2017 to the date of inspection (herein referred to as the "inspection review period"). The physical site tour of the facility included interviews with the following staff with the Ontario Clean Water Agency (OCWA): Rebecca Marshall Process Compliance Technician, and Claude Mongrain, Overall Responsible Operator.

Prior to this inspection, the Temagami South Lagoon system was previously inspected on October 23, 2012.

This August 2, 2017 inspection was focused on the wastewater treatment plant facility, but did not include an assessment of compliance with any Air related approvals that exist for the site. Physical inspections of the outstations, i.e. sewage pumping stations, were also not conducted during this treatment plant inspection.

Authorizing/Control Documents

- The owner had a valid Environmental Compliance Approval for the sewage works.

The facility is governed by several Environmental Compliance Approvals with the following numbers:

- ECA # 1-503-77-006, issued on August 23, 1977

Authorizing/Control Documents

- ECA # 1-503-77-006, issued on January 13, 1992,
- ECA # 3-0653-93-006 issued on September 3, 1993, and
- ECA # 3-1567-98-006, issued on November 3, 1998,
- Notice # 1, amending ECA # 3-1567-98-006, issued December 3, 2008.

ECA # 3-1567-98-006, issued on November 3, 1998, as amended by Notice # 1, issued December 3, 2008, will be referred to as the ECA for the remainder of this inspection report.

Capacity Assessment

- **The annual average daily flow was not approaching the rated capacity of the sewage works**

According to the ECA, the Temagami South Lagoons have a rated daily flow capacity of 232 m³ day, and consist of two cells with a combined storage capacity of 45,800 m³.

Based on the information contained in the 2016 Annual Performance Report, the Temagami South Lagoons reportedly treated an average daily flow of 115 m³/day during the 2016 operating year, representing approximately 49.6% of the rated capacity.

In 2017, for the months of January to July, the Temagami South Lagoon had an average daily flow of 118.4 m³/day, representing approximately 51% of the rated capacity specified in the ECA.

The annual average daily flow was not observed to be approaching the rated capacity of the sewage works.

- **The owner of the sewage works had prepared a written statement certified by a Professional Engineer confirming that the proposed works were constructed in accordance with the Environmental Compliance Approval.**

The Temagami South Lagoon was initially approved and constructed in the late 1960s. At the time of the inspection, as-constructed drawings were reviewed which were consistent with the constructed works inspected during the physical site visit.

- **Flow measuring devices were installed, calibrated and maintained in accordance with the requirements of the Environmental Compliance Approval.**

Condition 2.1 (A) of the ECA specifies that "a sufficient number of flow measuring devices, calibrated at regular intervals not exceeding one year to ensure their accuracy to within plus or minus 15 % of actual rate of flow within the full scale reading of the measuring device, shall be installed, maintained and operated in order to measure and record the quantity of sewage being conveyed to the sewage treatment plant." Influent flow into the sewage treatment plant is measured by a Miltronics Transmitter at the wet-well for the sewage pumping station upstream of the Temagami South Lagoon. The sewage pumping station is beyond the scope of this inspection report and was not evaluated. Effluent discharging from the sewage lagoon is measured using a magnetic flow meter. Records indicate that the effluent flow meter was calibrated annually with the most recent calibrations conducted on July 28, 2017, and November 2, 2016.

Treatment Processes

- **The owner had ensured that all equipment/components associated with the works was installed in accordance with the Environmental Compliance Approval.**

The ECA references the following components of the sewage lagoon system:

- two cells with a combined storage capacity of 45,800 m³.
- inter-cell flow control chamber;
- flow control structure consisting of a recirculating pump room, a three compartment flow separation chamber, a

Treatment Processes

chemical storage room and associated pipe work;

- chemical feed system for phosphorus removal consisting of a recirculation pump having a capacity of 90 L/s against 10 m TDH, intake piping from both cells to pump wet well and recirculation discharge piping and a 11,250 L capacity chemical storage tank and chemical feed piping system;
- outfall pipe.

It was noted during the inspection that the installed works generally matched the components approved in the facility's ECA.

- The sewage works effluent was essentially free of foreign substances on the day of the inspection.

Effluent Quality and Quantity

- The sewage works effluent sample results did not meet the effluent objectives stated in the Environmental Compliance Approval.

Condition 3.1 of the ECA, establishes effluent quality objectives that the Municipality is obligated to use best efforts to meet on an ongoing basis. The objectives are to be used as a mechanism to promote continuous improvement in the operation of the works and to trigger corrective action proactively and voluntarily before environmental impairment occurs.

The ECA establishes the following effluent objectives:

- BOD5: Monthly Average Concentration < 15 mg/L; Monthly Loading Objective: 43.1 kg/day;
- Total Suspended Solids (TSS): Monthly Average Concentration < 20 mg/L; Monthly Loading Objective: 57.5 kg/day;
- Total Phosphorus (TP): Monthly Average Concentration < 1 mg/L; Monthly Loading Objective: 2.9 kg/day;

In 2017, all of the limits specified in the ECA were met during the seasonal discharges, however the objective for BOD5 was not met during the Spring 2017 discharge. During the Spring 2017 discharge, the average concentration of BOD5 was reported to be 18.4 mg/L, exceeding the objective specified in the ECA of 15 mg/L. The limit specified in the ECA for BOD5 is 25 mg/L.

In 2016, the limit for Total Suspended Solids was exceeded for the Spring discharge. The ECA specifies a limit of 25 mg/L, and an objective of 20 mg/L. The average concentration of the five samples taken during the seasonal discharge period was 35.2mg/L.

- The sewage works effluent was discharged in accordance with Environmental Compliance Approval.

Notice #1 of ECA # 3-1567-98-006 Issued on December 3, 2008 provides the following discharge windows for the spring and fall effluent discharge from the facility:

Spring: discharge commencing not earlier than May 1 and terminating not later than June 15 at a rate not exceeding 33.3 L/s;

Fall: discharge commencing not earlier than October 15 and terminating not later than November 30 at a rate not exceeding 33.3 L/s.

Records reviewed for discharges that occurred during 2016 and during the Spring of 2017 indicated that effluent from the facility is discharged in accordance with the requirements of the ECA.

Monitoring Requirements

- All sewage works effluent sampling requirements prescribed by the Environmental Compliance Approval

Monitoring Requirements

were met.

Condition 3.1 (C) of the ECA requires the final effluent sampling and monitoring be completed as follows:

- BOD5: 5 grab samples per discharge;
- Suspended Solids: 5 grab samples per discharge;
- Total Phosphorus: 5 grab samples per discharge;
- Ammonia + Ammonium Nitrogen: 5 grab samples per discharge;

Samples of final effluent from the sewage treatment plant shall be collected from the lagoon outlet structure at least five times during each seasonal discharge, namely, at the beginning of the discharge, at 25%, 50% and 75% drawdown in the lagoon, and at the end of the discharge.

Additionally, prior to seasonal discharge, the lagoon contents shall be grab sampled and analyzed for Total Phosphorus, Hydrogen Sulphide and E. Coli.

Records were reviewed during the inspection indicate that the facility has ensured that effluent monitoring was being conducted as outlined in the ECA.

- **All sewage works Influent (raw sewage) sampling requirements prescribed by the Environmental Compliance Approval were met.**

Condition 3.1 (C) of the ECA, requires the raw sewage influent sampling and monitoring be completed as follows:

- BOD5: Quarterly grab;
- Suspended Solids: Quarterly grab;
- Total Phosphorus: Quarterly grab;
- Total Kjeldahl Nitrogen: Monthly composite;

Sampling records were reviewed during the inspection indicate that the facility has conducted influent grab samples quarterly, and had those samples analyzed externally by a licenced laboratory.

Results of all testing is tabulated on spreadsheets forming part of the record keeping mechanisms.

- **The owner had maintained the monitoring records for the period prescribed by the Environmental Compliance Approval.**

Condition 2.3 of the ECA requires that the Municipality retain for a minimum of three years from the date of their creation, all records and information related to or resulting from the monitoring activities required by the ECA.

Records were reviewed during the inspection indicated that the facility is maintaining records in accordance with the ECA.

- **All exceedances of any prescribed parameters were reported in accordance with the Environmental Compliance Approval.**

Condition 4.2 of the ECA specifies that the Municipality shall report to the District Manager any loading, concentration or other result that exceeds an effluent limit specified in Condition 1.1 through 1.5 orally, as soon as is reasonably possible, and in writing within seven (7) days of the exceedance.

During the Spring, 2016 discharge, a limit exceedance of Total Suspended Solids was observed during the sampling. This exceedance was reported orally to the Ministry's Spills Action Centre on June 17, 2016 at approximately 10:35. The incident was documented in the Ministry's IDS database in reference # 5424-AAZK4M.

Certification and Training

Certification and Training

- **Only operators with the appropriate level of licence made adjustments to the wastewater treatment and collection system equipment.**

The Temagami South Lagoon is a Class 1 Wastewater treatment facility, (Certificate # 2284), that was issued March 1, 1994.

The Municipality has ensured that all operators making adjustments to the process equipment possess the appropriate level of wastewater treatment certification. The Municipality has ensured that every operator employed in the facility holds a license applicable to wastewater treatment, in accordance with the requirements of section 4(1) of Ontario Regulation 129/04.

- **All operators have the appropriate level of training and or experience for the wastewater treatment and collection facilities in accordance with the requirements of the Environmental Compliance Approval.**

Condition 3.7 of the ECA requires that the Township provide for the overall operation of the sewage treatment plant with an operator who holds a licence that is applicable to that type of facility and that is of the same class as or higher than the class of the facility in accordance with Ontario Regulation 435/93.

It was noted during the inspection that the Township has ensured that the Temagami South Lagoon is operated in accordance with Condition 3.7 of the ECA.

- **The overall responsible operator had been designated for the wastewater treatment and collection works.**

During the inspection it was observed that the Township has ensured that operators possessing Class 1 Wastewater Certification are available to serve as the overall responsible operator for the Temagami South Lagoon Class 1 Wastewater Treatment Plant. The Township has contracted the Ontario Clean Water Agency (OCWA) to serve as the Overall Responsible Operator for the Temagami South Lagoon. At the time of the inspection, there is a sufficient number of operators possessing a Class 1 or higher licence for the operation of the facility.

Records identifying the name of the individual serving in the capacity of ORO, are documented within facility logbooks on a daily basis. The Township has designated the operators who possess the appropriate level of certification to act as Operator-in-Charge (OIC) as required.

Logbooks

- **The logs and record keeping mechanisms for the sewage works complied with the record keeping requirements.**

A review of the Facility Logbook confirmed that entries were made, by the operator-in-charge, of all adjustments made to the treatment processes.

Operations Manuals

- **The operations and maintenance manuals met the requirements of the Environmental Compliance Approval.**

Condition 3.3 of the ECA requires that the Municipality prepare an operations manual, based on the operational objectives stipulated by the Conditions 3.1 and 3.2 of the ECA, and that this manual be kept up to date.

A review of the operations manual was reviewed during the inspection. The operations manual for the facility complied with the requirements specified in the facility's ECA.

- **The operations and maintenance manuals contained up-to-date plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.**

Operations Manuals

The operations and maintenance manuals for the facility were reviewed during the site inspection. The manuals contained up-to-date plans, drawings and process descriptions that appeared to be sufficient for the safe and efficient operation of the sewage works.

Contingency/Emergency Planning

- **For Lagoon Systems, the owner is conforming with the freeboard and berm conditions in the MOE Design Guidelines for Sewage Works.**

The Temagami South Lagoon appeared to have sufficient freeboard to conform to the MOE Design Guidelines for Sewage Works.

- **Spill containment was provided for the process chemicals and/or standby power generator fuel.**

The on-site alum tank has been placed in a section of the plant that appeared to have sufficient secondary containment to contain any spills or leaks.

- **The owner had provided security measures for the facility.**

The Temagami South Lagoon is fully enclosed by a chain link fence.

NON-COMPLIANCE WITH REGULATORY REQUIREMENTS AND ACTIONS REQUIRED

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues. Further details pertaining to these items can be found in the body of the inspection report.

Not Applicable

SUMMARY OF RECOMMENDATIONS AND BEST PRACTICE ISSUES

This section provides a summary of all recommendations and best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following issues and consider measures to address them.

1. The sewage works effluent sample results did not meet the effluent objectives stated in the Environmental Compliance Approval.

Recommendation:

By January 15, 2018, submit a plan to the Drinking Water Manager detailing the actions necessary to ensure seasonal discharges are in accordance with effluent objectives specified within the ECA.

SIGNATURES

Inspected By:

Scott Steeves



Signature: (Provincial Officer)



Reviewed & Approved By:

Jatinbhai Patel

Signature: (Supervisor)

Review & Approval Date: 04/12/2017

Note: This inspection does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they apply or may apply to this facility. It is, and remains, the responsibility of the owner and/or operating authority to ensure compliance with all applicable legislative and regulatory requirements.