



Ministry of the Environment and Climate Change Ministère de l'Environnement et de l'Action en matière de changement climatique

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1975-AN3RZW Issue Date: June 21, 2017

The Corporation of the Municipality of Temagami

7 Lakeshore Dr

Post Office Box, No. 220

Temagami, Ontario

P0H 2H0

Site Location:

Temagami North Lagoon

37 Cedar Ave

Temagami Municipality, District of Nipissing

P0H 2H0

M.O.E.C.C NORTHERN REGION

OKTITEININ INEGION

JUL 0 4 2017

RECEIVED NORTH BAY

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

Existing sewage treatment works with a Rated Capacity of 390 m³/day and Peak Flow Rate of 1,200 m³/day serving the Municipality of Temagami and with a continuous discharge to Net Lake, consisting of the following:

PROPOSED WORKS APPROVED ON MAY 25, 2015 UNDER ECA No. 9498-9V7J5Y:

Cedar Avenue Pump Station (Sewage Pump Station No. 1)

An upgrade to the existing sewage pump station by replacing the existing three (3) 3.7 hp sewage pumps with the following:

• One (1) sewage pumping station (Sewage Pump Station No. 1) located beside the Temagami North Water Treatment Plant of Cedar Avenue consisting of three (3) new 5.5 hp sewage pumps (two on duty, one on standby), each pump rated at 22.2 L/sec @ 10.0 m TDH and discharging to Lagoon # 1 described below;

Chemical Addition System

• One (1) 1000 L capacity chemical (Ferric Sulphate Solution) storage tank;

- One (1) 1.0 L/min capacity chemical dosing pump discharging to a valve chamber located between Cell #1 and Cell #2; and
- Including all controls and associated appurtenances.

All in accordance with the documents listed in Schedule 'A'.

PREVIOUS WORKS APPROVED ON OR BEFORE JUNE 18, 2002 UNDER ECA No. 6321-5A7H3H:

Description of the upgraded existing sewage works consisting of the following:

Cedar Avenue Pump Station (Sewage Pump Station No. 1)

- One (1) dry well sewage pumping station (Sewage Pump Station No. 1) located beside the Temagami North Water Treatment Plant of Cedar Avenue consisting of three (3) 3.7 hp sewage pumps (two on duty, one on standby), each pump rated at 12.2 L/sec @ 7.6 m TDH and discharging to Lagoon # 1 described below;
- One (1) 80 kW capacity standby diesel generator;

Spruce Drive Pump Station (Sewage Pump Station No. 2)

- One (1) sewage pumping station (Sewage Pump Station No. 2) servicing the trailer park and Spruce Drive consisting of two (2) submersible sewage pumps (one on duty, one on standby), each pump rated at approximately 6.3 L/sec and discharging to sanitary sewage collection system flowing to the Cedar Avenue Pump Station described above;
- One (1) 25 kW capacity standby natural gas generator;

Aerated Lagoons

- One (1) aerated lagoon (Lagoon Cell #1) with a total holding capacity of approximately 4,105 m³ with approximate depth of 3.05 m and approximate surface area of 1,300 m², equipped with twelve (12) fine bubble aeration units with a design capacity of 148 m³/hr of air evenly distributed within the entire cell;
- One (1) aerated lagoon (Lagoon Cell #2) with a total holding capacity of approximately 20,950 m³ with approximate depth of 1.5 m and approximate surface area of 13,300 m², equipped with twenty two (22) fine bubble aeration units with a design capacity of 148 m³/hr of air within the first half portion of the cell;
- Three (3) air blowers each with a rated capacity of 82 m³/hr at 62 kPa (two on duty, one on

standby) located in a blower building and equipped with air distribution and cleaning system;

Effluent Outlet

• One (1) 450 mm diameter effluent outlet pipe from Lagoon Cell #2 equipped with one (1) stop-log level control and one (1) 15 m long rip-rap covered outfall channel, discharging to Net Lake;

Sludge Dewatering System

- One (1) bermed holding area located adjacent to Lagoon Cell #2 designed to hold sludge dewatering geotubes with approximate bottom dimensions of 17 m long x 14 m wide equipped with geotextile plastic liner and a drainage trench directing dewatered effluent into Lagoon Cell #2 for further treatment; and
- Including all controls and associated appurtenances.

All in accordance with the documents listed in Schedule 'A'.

For the purpose of this environmental compliance approval, the following definitions apply:

"Annual Average Concentration" means the arithmetic mean of the Monthly Average Concentrations of a contaminant in the effluent calculated for any particular calendar year;

"Approval" means this entire document and any schedules attached to it, and the application;

"Annual Average Daily Flow" means the cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year;

"BOD₅" (also known as TBOD₅) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

"By-pass" means diversion of sewage around one or more unit processes within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final effluent sampling location, and discharging to the environment through the Sewage Treatment Plant outfall;

"CBOD₅" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"Daily Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the

purposes of Part II.1 of the EPA;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

"E. Coli" refers to the thermally tolerant forms of Escherichia that can survive at 44.5 degrees Celsius;

"Emergency Situation" means a structural, mechanical or electrical failure that causes a temporary reduction in the capacity of the Sewage Treatment Plant or an unforeseen flow condition that may result in:

- a) danger to the health or safety of any person; or,
- b) injury or damage to any property, or serious risk of injury or damage to any property; or
- c) treatment process biomass washout.

"Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;

"Event" means an action or occurrence, at a given location within the Works that causes a Bypass or Overflow. An Event ends when there is no recurrence of a Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Two Events are separated by at least 12 hours during which there has been no recurrence of a Bypass or Overflow. An Overflow Event and a Bypass Event are two separate reportable events even when they occur concurrently;

"Final Effluent" means effluent that are discharged to the environment through the approved Final Effluent Outfall, including all Bypasses, that are required to comply with the effluent limits stipulated in the Approval for the Sewage Treatment Plant, pertaining specifically to the Final Effluent sampling point;

"Geometric Mean Density" is the nth root of the product of multiplication of the results of n number of samples over the period specified;

"Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make to the Works under this Approval;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Monthly Average Concentration" means the arithmetic mean of all Single Sample Concentrations of a contaminant in the Final Effluent sampled or measured, or both, during a calendar month;

"Notice of Modifications" means the form entitled "Notice of Modifications to Sewage Works";

"Overflow" means a discharge to the environment from the Works at a location other than the Sewage Treatment Plant outfall or into the outfall downstream of the Final Effluent sampling

point;

"Owner" means Municipality of Temagami and its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

"Partial Treatment" means any treatment that does not include the full train of unit processes of the Sewage Treatment Plant described and approved in the Approval;

"Peak Flow Rate" means the Peak Instantaneous Flow Rate, Peak Hourly Flow Rate or Peak Daily Flow Rate of sewage for which the Sewage Treatment Plant or treatment process unit or equipment is designed to handle, as appropriate;

"Previous Works" means those portions of the sewage works previously constructed and approved under an Approval;

"Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;

"Rated Capacity" means the Annual Average Daily Flow for which the Works are approved to handle;

"Sewage Treatment Plant" means the entire sewage treatment and effluent discharge facility;

"Substantial Completion "has the same meaning as "substantial performance" in the <u>Construction</u> Lien Act;

"Water Supervisor"means the Water Supervisor for the North Bay office of the Ministry; and

"Works" means the sewage works described in the Owner's application, and this Approval, and includes Proposed Works, Previous Works, and modifications made under Limited Operational Flexibility.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

- (1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these conditions, the Owner shall design, build, install,

- operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.
- (3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.
- (4) Where there is a conflict between the documents listed in the Schedule submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

2. EXPIRY OF APPROVAL

The approval issued by this Approval will cease to apply to those parts of the Proposed Works which have not been constructed within five (5) years of the date of this Approval.

3. CHANGE OF OWNER

- (1) The Owner shall notify the Water Supervisor and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - (a) change of Owner;
 - (b) change of address of the Owner;
 - (c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the <u>Business Names Act</u>, R.S.O. 1990, c.B17 shall be included in the notification to the Water Supervisor;
 - (d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the <u>Corporations</u> <u>Information Act</u>, R.S.O. 1990, c. C39 shall be included in the notification to the Water Supervisor;
- (2) In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the Water Supervisor and the

Director.

4. UPON THE SUBSTANTIAL COMPLETION OF THE WORKS

- (1) Upon the Substantial Completion of the Proposed Works, the Owner shall prepare a statement, certified by a Professional Engineer, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry personnel.
- (2) Within one (1) year of the Substantial Completion of the Proposed Works, a set of as-built drawings showing the Works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

5. BYPASSES

- (1) Any Bypass is prohibited, except:
 - (a) in an Emergency Situation;
 - (b) where the Bypass is a direct and unavoidable result of a planned maintenance procedure or other circumstance(s), the Owner having notified the Water Supervisor at least fifteen (15) days prior to the occurrence of Bypass and the Water Supervisor has given written consent of the Bypass;
- (2) For any Bypass Event, the Owner shall forthwith notify the Spills Action Centre (SAC), and the local Medical Officer of Health. This notice shall include, at a minimum, the following information for each Event:
 - (a) the date(s), time(s) of the Bypass(es);
 - (b) the treatment process(es) Bypassed and the status of the disinfection;
 - (c) the reason(s) for the Bypass(es).
- (3) After any Bypass Event, the Owner shall collect and record the following information:
 - (a) the duration of the Bypass Event;
 - (b) the measured or the estimated volume of Bypass(es) for each Event.
- (4) For any Bypass Event, the owner shall collect sample(s) of the Final Effluent, representative of the Event, at the Final Effluent Compliance Sampling Point, and analyze for all effluent parameters outlined in Effluent Limits condition. These samples shall be in

- addition to the regular samples required in the Monitoring and Recording condition and shall follow the same Protocols specified in the Monitoring and Recording condition.
- (5) The Owner shall submit a summary report of the Bypass Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary reports shall be in an electronic format, which shall contain, at a minimum, the types of information set out in Subsections (2), (3) and (4) for Bypass(es). The Water Supervisor may modify the reporting frequency at any time in writing.

6. OVERFLOWS

- (1) Any Overflow is prohibited, except:
 - (a) in an Emergency Situation;
 - (b) where the Overflow is a direct and unavoidable result of a planned maintenance procedure or other circumstance(s), the Owner having notified the Water Supervisor at least fifteen (15) days prior to the occurrence of the Overflow and the Water Supervisor has given written consent of the Overflow.
- (2) For any Overflow Event, the Owner shall forthwith notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information for each Event:
 - (a) the date(s), time(s) of the Overflow(s);
 - (b) the location(s) of the Overflow(s) and the receiver;
 - (c) the reason(s) for the Overflow(s); and
 - (d) the level of treatment the Overflow(s) has received and disinfection status of same.
- (3) After any Overflow Event, the Owner shall collect and record the following information:
 - (a) the duration of the Overflow Event;
 - (b) the monitored or estimated volume of the Overflow(s); and
 - (c) the impact of Overflow(s) on the receiver.
- (4) For any Overflow Event, the Owner shall collect samples, representative of the Event, consisting of a minimum of two (2) grab samples of the Overflow, one at the beginning of the Event and one approximately near the end of the Event, and every 4 hours for the

- duration of the Event, and have them analyzed for effluent parameters outlined in Effluent Limits condition. For raw sewage and primary treatment system Overflow, BOD5 shall be monitored instead of CBOD5.
- (5) The Owner shall submit a summary report of the Overflow(s) Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary report shall be in an electronic format, which shall contain, at a minimum; the types of information set out in Subsections (2), (3) and (4) for Overflow(s). The Water Supervisor may modify the reporting frequency at any time in writing.

7. EFFLUENT OBJECTIVES

(1) 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.

Table 1 - Effluent Objectives		
Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)	
CBOD ₅	25.0 mg/L	
Total Suspended Solids	30.0 mg/L	

- (2) The Owner shall use best efforts to:
 - (a) maintain the pH of the effluent from the Works within the range of 6.5 to 8.5, inclusive, at all times;
 - (b) operate the works within the Rated Capacity of the Works;
 - (c) ensure that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters.
- (3) The Owner shall include in all reports submitted in accordance with Condition 12 a summary of the efforts made and results achieved under this Condition.

8. EFFLUENT LIMITS

(1) The Owner shall operate and maintain the Works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works.

Table 2 - Effluent Limits			
Effluent Parameter	Average Concentration (milligrams per litre unless otherwise indicated)		
Column 1	Column 2		
CBOD ₅	30.0		
Total Suspended Solids	40.0		

- (2) For the purposes of determining compliance with and enforcing subsection (1):
 - (a) The Annual Average Concentration of a parameter named in Column 1 of subsection (1) shall not exceed the corresponding maximum concentration set out in Column 2 of subsection (1).
 - (b) The pH of the effluent shall be maintained between 6.0 to 9.5, inclusive, at all times.
- (3) The effluent limit set out in subsection (1) shall apply upon the issuance of this Approval.

9. OPERATION AND MAINTENANCE

- (1) The Owner shall exercise due diligence in ensuring that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, including training in all procedures and other requirements of this Approval and the Act and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.
- (2) The Owner shall prepare an operations manual within one (1) year of Substantial Completion of the Proposed Works, that includes, but not necessarily limited to, the following information:
 - (a) operating procedures for routine operation of the Works;
 - (b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;

- (c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;
- (d) procedures for the inspection and calibration of monitoring equipment;
- (e) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Water Supervisor; and
- (f) procedures for receiving, responding and recording public complaints, including recording any follow up actions taken.
- (3) The Owner shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
- (4) The Owner shall provide for the overall operation of the Works 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 129/04.

10. MONITORING AND RECORDING

The Owner shall carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) For the purposes of this condition, the following definitions apply:
 - (a) Daily means once each day;
 - (b) Weekly means once each week;
 - (c) Monthly means once every month; and
 - (d) Annually means once every twelve months.
- (3) Samples shall be collected at the following sampling points, at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 3 - Influent Monitoring Sampling Location: Cedar Avenue Pump Station				
Parameters	Sample Type	Frequency		
BOD	Composite	Monthly		
Total Suspended Solids	Composite	Monthly		
Total Phosphorus	Composite	Monthly		
Total Kjeldhal Nitrogen	Composite	Monthly		

Table 4 - Effluent Monitoring Sampling Location: Effluent Outlet from Lagoon Cell #2			
Parameters	Sample Type	Frequency	
CBOD,	Composite	Monthly	
Total Suspended Solids	Composite	Monthly	
Total Phosphorus	Composite	Monthly	
Total Ammonia Nitrogen	Composite	Monthly	
E. Coli	Grab	Monthly	
рН	Grab	Weekly	

- (4) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
 - (a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;
 - (b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended from time to time by more recently published editions;
 - (c) the publication "Standard Methods for the Examination of Water and Wastewater"(21st edition), as amended from time to time by more recently published editions;
- (5) The measurement frequencies specified in subsection (2) in respect to any parameter are minimum requirements which may, after two (2) years of monitoring in accordance with this Condition, be modified by the Water Supervisor in writing from time to time.
- (6) The Owner shall install and maintain continuous flow measuring devices calibrated at regular intervals not exceeding one (1) year, to measure the flow rate of the **influent to the Works (to Cedar Avenue Pump Station)** with an accuracy to within plus or minus 15 per cent (+/- 15%) of the actual flow rate for the entire design range of the flow measuring device, and record the flow rate at a daily frequency.

- (7) The Owner shall measure and record once annually the level of sludge accumulated in the sewage lagoon (Lagoon Cell #2), and record the total volume of dewatered sludge disposed off-site and where the dewatered sludge was disposed during the reporting period;
- (8) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

11. LIMITED OPERATIONAL FLEXIBILITY

- (1) The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works", included under Schedule B of this Approval, as amended.
- (2) Sewage works proposed under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.
- (3) The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.
- (4) For greater certainty, the following are <u>not</u> permitted as part of Limited Operational Flexibility:
 - (a) Modifications to the Works that result in an increase of the Rated Capacity of the Works;
 - (b) Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;
 - (c) Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;
 - (d) Modifications to the Works approved under s.9 of the EPA, and
 - (e) Modifications to the Works pursuant to an order issued by the Ministry.
- (5) Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.
- (6) If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, as deemed necessary in consultation with the Water Supervisor, provide a revised copy of this plan for approval to the local fire services authority prior to implementing Limited Operational Flexibility.

- (7) For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the Environmental Protection Act, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, Lake Simcoe Protection Act and Greenbelt Act.
- (8) Prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the Water Supervisor.

12. REPORTING

- (1) Ten (10) days prior to the date of a planned By-pass being conducted pursuant to Condition 5 and as soon as possible for an unplanned By-pass, the Owner shall notify the Water Supervisor (in writing) of the pending start date, in addition to an assessment of the potential adverse effects on the environment and the duration of the By-pass.
- (2) The Owner shall report to the Water Supervisor or designate, any exceedence of any parameter specified in Condition 8 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedence.
- (3) In addition to the obligations under Part X of the Environmental Protection Act, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the Water Supervisor describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
- (4) The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
- (5) The Owner shall prepare, and upon request, submit to the Water Supervisor a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
 - (a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 8, including an overview of the success and adequacy of the Works;
 - (b) a description of any operating problems encountered and corrective actions taken;

- (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
- (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 7;
- (g) a summary of the report collected under Condition 10 (7) including the lagoon sludge level, the total volume of dewatered sludge disposed off-site, and where the dewatered sludge was disposed;
- (h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (i) a summary of all By-pass, spill or abnormal discharge events;
- (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;
- (k) a report summarizing all modifications completed as a result of Schedule B, Section 3; and
- (l) any other information the Water Supervisor may require from time to time.
- (6) The Owner shall, within thirty (30) calendar days of issuance of this Approval, submit a Municipal Wastewater System Profile Information Form, and shall resubmit the updated document every time a notification is provided to the Water Supervisor in compliance with requirements of change of ownership under this Approval.

13. INSTALLATION OF AN EFFLUENT DISINFECTION SYSTEM

Before May 25, 2018, the Owner shall submit an application to the Director for the installation of an effluent disinfection system for the Works along with a detailed design drawings, specifications and design calculations for the Proposed Works for approval by the Director.

Schedule 'A'

I. PREVIOUS WORKS APPROVED ON OR BEFORE JUNE 18, 2002 UNDER ECA No. 6321-5A7H3H:

1. Design report, final plans and specifications prepared by James F. MacLaren Limited, Consulting Engineers submitted for the issuance of the Certificate of Approval # 3-0544-79-006 dated August 15, 1979.

II. PROPOSED WORKS APPROVED ON MAY 25, 2015 UNDER ECA No. 9498-9V7J5Y:

1. Application for Environmental Compliance Approval (ECA) amendment submitted by Municipality of Temagami dated February 9, 2015 and design brief and drawings prepared by Ontario Clean Agency Engineering Services dated February 2015.

III. APPLICATION FOR THE EXTENSION OF THE DEADLINE FOR DISINFECTION SYSTEM:

 Application for Environmental Compliance Approval (ECA) amendment submitted by Municipality of Temagami dated November 24, 2016 for the extension of the deadline set under Condition 12 of ECA No. 9498-9V7J5Y issued on May 25, 2015.

Schedule B

Limited Operational Flexibility Criteria for Modifications to Municipal Sewage Works

The modifications to sewage works approved under an Environmental Compliance Approval
(Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined
below and are subject to the LOF conditions in the Approval, and require the submission of the
Notice of Modifications. If there is a conflict between the sewage works listed below and the
Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take
precedence.

1.1 Sewage Pumping Stations

a. Adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the facility Rated Capacity is not exceeded and the existing flow process and/or treatment train are maintained, as applicable.

1.2 Sewage Treatment Process

- a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.
- b. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.
- c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.
- d. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the works that result in an increase of the Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.
- e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm capacity, reliability, performance standard, level of quality and redundancy of

the group of equipment is kept the same. For clarity proposes, the following equipment can be considered under this provision: screens, grit separators, blowers, aeration equipment, sludge thickeners, dewatering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

1.3 Sewage Treatment Plant Outfall

a. Replacement of discharge pipe with similar pipe size provided that the outfall location is not changed.

1.4 Sanitary Sewers

a. Pipe relining and replacement with similar pipe size within the Sewage Treatment Plant site, where the nominal diameter is not greater than 1,200mm.

1.5 Pilot Systems

- a. Installation of pilot systems for new or existing technologies provided that:
 - i. any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,
 - ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
 - iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and Water Supervisor three months after completion of the pilot project.
- 2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.
- 3. 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.
- 4. The modifications noted in section (3) above are <u>not</u> required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.



The reasons for the imposition of these terms and conditions are as follows:

- 1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.
- 2. Condition 2 is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction, to ensure the ongoing protection of the environment.
- 3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
- 4. Condition 4 is included to ensure that the Works are constructed in accordance with the approval and that record drawings of the Works "as constructed" are maintained for future references.
- 5. Condition 5 and 6 are included to indicate that Bypass / Overflows of untreated or partially treated sewage to the receiving watercourse is prohibited, save in certain limited circumstances where the failure to Bypass / Overflow could result in greater injury to the public interest than the Bypass itself where a Bypass / Overflow will not violate the approved effluent requirements, or where the Bypass / Overflow can be limited or otherwise mitigated by handling it in accordance with an approved contingency plan. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Bypass / Overflow events.
- 6. Condition 7 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs and before the compliance limits of Condition 7 are exceeded.
- 7. Condition 8 is imposed to ensure that the effluent discharged from the Works to the Net 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.
- 8. Condition 9 is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry.

Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the work.

- 9. Condition 10 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and effluent limits specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.
- 10. Condition 11 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These Conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the Terms and Conditions of this Approval, MOE policies, guidelines, and industry engineering standards and best management practices.
- 11. Condition 12 is included 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 this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.
- 12. Condition 13 is included to require the Owner install an effluent disinfection system to ensure that existing Works consistently meet the effluent limits requirement of an E. Coli Monthly Geometric Mean of 200 counts per 100 ml which is the minimum requirement for all sewage works effluent discharging to a surface water receiver.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 9498-9V7J5Y issued on May 25, 2015

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

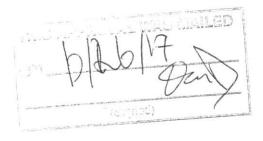
AND

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment and Climate Change 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 21st day of June, 2017



Fariha Parnu.

Fariha Pannu, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

SH/

- c: Area Manager, MOECC North Bay &
- c: District Manager, MOECC Sudbury Shawn Sadler, exp Services Inc.



Notice of Modifications Dec-2013.pdf