

AMENDED ENVIRONMENTAL COMPLIANCE APPROVALNUMBER 9189-A6UPSM
Issue Date: February 23, 2016

The Corporation of the Township of North Huron
274 Josephine St Wingham
North Huron, Ontario
N0G 2W0

Site Location: North Huron Blyth Sewage Treatment Plant (STP) and the Blyth Main Sewage Pumping Station (SPS)
intersection of Gypsy Ln. and Thuell St. (SPS) STP located approx. 300m NW of the SPS
North Huron Township, County of Huron

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

Existing sewage works at the Blyth Sewage Treatment Plant (NAD 83, UTM zone 17, 465,305 m Easting and 4,843,380 m Northing) with a rated capacity of 730 m³/d and peak flow rate of 2,730 m³/d for the collection, transmission, treatment and disposal of domestic sewage from the Township of North Huron, located at the above site location, and consisting of the following:

Main Sewage Pumping Station

A sewage pumping station located at the intersection of Gypsy Lane at Thuell Street consists of:

- one (1) submersible pump, approximate capacity of 8.5 L/s at 20.0 m TDH;
- one (1) submersible pumps, approximate capacity of 32.0 L/s at 20.8 m TDH;
- one (1) submersible pumps, approximate capacity of 39.0 L/s at 23.0 m TDH;
- an emergency by-pass chamber;
- an emergency overflow outlet to Blyth Creek;
- an emergency power cable for emergency power supply from the stand-by generator set located in the Blyth Sewage Treatment Plant;

Blyth Sewage Treatment Plant

A sewage treatment plant located approximately 300 m northwest of the intersection of Thuell Street and Gypsy Lane, with major equipment housed in the Control Building, consisting of the following:

- influent work structure c/w a bar screen, an emergency by-pass bar screen, two (2) grit channels each rated at 39.5 L/s, and an emergency by-pass overflow to the chlorine contact chamber;
- two (2) compartment aeration tank with a total volume of 708 cu.m., complete with fine bubble air diffusers, three (3) 215 L/s @ 60 kPa blowers (one on duty and two on standby) c/w 29.83 kW electric motors, interconnecting piping between aeration basins, influent channels and clarifier feed pipes;
- one (1) 9.76 dia. final clarifier c/w a scraper mechanism, a sludge withdrawal line, a scum collection system and an effluent channel (c/w sludge return/wasting facilities, two(2) activated sludge return/waste pumps, each rated at 20.3 L/s @ 4.0 m TDH);
- a 27.3 cu.m chemical (alum/ferric chloride) storage tank, complete with two (2) solenoid actuated diaphragm metering pumps, each rated at 150 L/d @ 1000 kPa for feeding either ferric chloride or alum;
- an effluent filtration system c/w filter splitter box, a filter backwash water equalization/ storage tank and backwash pump rated at 7.5 L/s @ 10.0 M TDH;
- two (2) flow proportional liquid sodium hypochlorite feed pumps, each rated at 4 litres per hour at 70 m TDH, c/w 200 L solution tank in a secondary containment;
- a chlorine contact chamber with a total volume of 28.8 cu.m.;
- an aerated sludge digester tank with a total volume of 85.1 cu.m.;
- one (1) aerated bio-solids holding tank of available storage volume of 930 cu.m. to provide 180 days of average storage with coarse bubble aeration system;
- a sludge transfer station to facilitate the hauling of waste sludge from the plant to the site;
- one (1) 125 kW emergency standby diesel generator set;

All in accordance with the supporting documents set out in Schedule "A" attached to this Approval.

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

"Act" means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

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

"Annual Average Loading" means the value obtained by multiplying the Annual Average Concentration of a contaminant by the Average Daily Flow over the same calendar year;

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

"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;

"*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.

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

"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 Sewage Treatment Plant that causes a Plant Bypass or Plant 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;

"Final Effluent" means sewage discharge via the Sewage Treatment Plant outfall after undergoing the full train of unit processes as listed in the Approval;

"Geometric Mean Density" is the n th 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 Daily Concentrations of a contaminant in the effluent sampled or measured, or both, during a calendar month;

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

"Monthly Average Loading" means the value obtained by multiplying the Monthly Average Concentration of a contaminant by the Monthly Average Daily Flow over the same calendar month;

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

"Owner" means The Township of North Huron and its successors and assignees;

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

"Peak Flow Rate" means the maximum rate of sewage flow for which the plant or process unit was designed;

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

"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 Average Daily Flow for which the Works are approved to handle;

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

"Water Supervisor" means the Water Supervisor for the Owen Sound District 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 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 Business Names Act , 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 Corporations Information Act , 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. BY-PASSES

(1) Any By-pass or Plant Overflow is prohibited, except:

(a) in an Emergency Situation;

(b) where the By-pass / Plant Overflow is a direct and unavoidable result of a planned maintenance procedure, the Owner notified the Water Supervisor 15 days prior to the By-pass and the Water Supervisor has given written consent of the Bypass;and

(c) where the By-pass / Plant Overflow is planned for research or training purposes, the discharger notified the Water Supervisor 15 days prior to the By-pass / Plant Overflow and the Water Supervisor has given written consent of the By-pass / Plant Overflow.

(2) The Owner shall forthwith notify the Spills Action Centre (SAC) and the Medical Officer of Health of all By-pass and Plant Overflow Events. This notice shall include, at a minimum, the following information:

(a) the date, time, and duration of the Event;

(b) the location of the Event;

(c) the measured or estimated volume of the Event (unless the Event is ongoing);

(d) the reason for the Event; and

(e) the level of treatment the By-pass(es) and/or Plant Overflow(s) received and disinfection status of same.

(3) The Owner shall submit By-pass and Plant Overflow Event Reports to the Ministry's local office on a quarterly basis, no later than each of the following dates for each calendar year: February 14, May 15, August 14, and November 15. Event Reports shall be in an electronic format specified by the Ministry. In each Event Report the Owner shall include, at a minimum, the following information on any Events that occurred during the preceding quarter:

(a) the date of the Event(s);

(b) the measured or estimated volume of the Event(s);

(c) the duration of the Event(s);

(d) the location of the Event(s);

(e) the reason for the Event(s); and

(f) the level of treatment the By-pass(es) and/or Plant Overflow(s) received and disinfection status of same.

(4) The Owner shall use best efforts to collect a representative sample consisting of a minimum of two (2) grab samples of the By-pass / Plant Overflow and have it analyzed for parameters outlined in Condition 6, one at the beginning of the Event and the second approximately near the end of the Event, to best reflect the effluent quality of such By-pass or Plant Overflow.

(5) The Owner shall maintain a logbook of all Plant By-passes and Plant Overflows, which shall contain, at a minimum, the types of information set out in subsection 2 (a) to 2(e) in respect of each By-pass and Plant Overflow.

5. EFFLUENT OBJECTIVES

(1) The Owner shall use best efforts to operate and maintain 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 Objective		
Effluent Parameter	Effluent Concentration (mg/L)	Effluent Waste Loading (kg/d)
CBOD5	4	2.9
Total Suspended Solids	4	2.9
Total Phosphorus	0.1	0.07
Total Ammonia as N Non-freezing season (May 1 to November 30)	1	-
Freezing season (Dec 1 to April 30)	3	-

Note: Total Ammonia = Ammonia + Ammonium

(2) The Owner shall use best efforts to:

- (a) maintain the pH of the effluent from the Works within the range of 6.5 - 9.0, inclusive, at all times;
- (b) operate and maintain the Works such that the effluent is continuously disinfected so that the monthly Geometric Mean Density of *E. Coli* does not exceed 100 organisms per 100 millilitres of effluent discharged from the Works;
- (c) operate the works within the Rated Capacity of the Works;
- (d) 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 9 a summary of the efforts made and results achieved under this Condition.

6. EFFLUENT LIMITS

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

Table 2 - Effluent Limits			
Discharge Period	Effluent Parameter	Effluent Concentration (mg/L)	Effluent Waste Loading (kg/d)
May 1 – Oct. 31	CBOD5	5	3.7
	Total Suspended Solids	5	3.7
	Total Phosphorus	0.3	0.2
	Total Residual Chlorine	0.2	-
Nov. 1 – April 30	CBOD5	15	11.0
	Suspended Solids	15	11.0
	Total Phosphorus	1	0.7
	Total Residual Chlorine	0.2	-
Non-freezing season (May 1 to November 30)			
May	Total Ammonia as N	3	-
June - September	Total Ammonia as N	1	-
October - November	Total Ammonia as N	3	-
Freezing season (Dec 1 to April 30)			
December	Total Ammonia as N	11	-
January	Total Ammonia as N	17	-
February	Total Ammonia as N	21	-
March	Total Ammonia as N	14	-
April	Total Ammonia as N	6	-

Note: Total Ammonia = Ammonia + Ammonium

(2) For the purposes of determining compliance with and enforcing subsection (1):

(a) The Monthly Average Concentration of a parameter named in Column 2 of subsection (1) shall not exceed the corresponding maximum concentration set out in Column 3 of subsection (1).

(b) The Annual Average Loading of CBOD5, Total Suspended Solids, Total Phosphorus shall not exceed the corresponding maximum waste loading set out in Column 4 of subsection (1).

(3) Notwithstanding subsections (1), the Owner shall operate and maintain the Works such that the effluent is continuously disinfected so that the monthly Geometric Mean Density of *E. Coli* does not exceed 200 organisms per 100 millilitres of effluent discharged from the Works.

(4) The Owner shall design and construct and operate and maintain the Works such that the pH of the effluent is maintained within the range of 6.0 - 9.5, inclusive, at all times.

(5) Paragraphs (a) and (b) of subsection (2) shall apply upon the issuance of this Approval.

(6) The effluent limit set out in subsections (3) and (4) shall apply upon the issuance of this Approval.

7. 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 upon the issuance of this Approval, 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 followup actions taken.

(3) The Owner shall keep a complete set of the up-to-date record drawings at the site of the sewage works throughout the operational life of the sewage works, and upon request, shall make the drawings available for inspection by Ministry staff.

(4) 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.

(5) 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.

8. MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the Works, 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) Bi-weekly means once every two weeks;

(3) Samples shall be collected at the following sampling points, at the minimum frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 3a - Raw Sewage Monitoring (Sampling point at the downstream of Screening)		
Parameters	Sample Type	Frequency
BOD5	Composite	bi-weekly
Total Suspended Solids	Composite	bi-weekly
Total Phosphorus	Composite	bi-weekly
Total Kjeldahl Nitrogen	Composite	bi-weekly

Table 3b - Effluent Monitoring (Sampling point at the downstream of the Disinfection Facility)		
Parameters	Sample Type	Frequency
CBOD5	Composite	bi-weekly
Total Suspended Solids	Composite	bi-weekly
Total Phosphorus	Composite	bi-weekly
Total (Ammonia + Ammonium) Nitrogen	Composite	bi-weekly
<i>E. Coli</i>	Grab	bi-weekly
Total Chlorine Residual	Grab	Three Times per week
pH	Grab	Three Times per week
Temperature	Grab	Three Times per week

(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" (January 1999), ISBN 0-7778-1880-9, 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 temperature and pH of the effluent from the Works shall be determined in the field at the time of sampling for Total Ammonia Nitrogen, using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

(6) The Owner shall install and maintain (a) continuous flow measuring device(s), to measure the flowrate of the influent to or effluent from the Works with an accuracy to within plus or minus 15 per cent (+/- 15%) of the actual flowrate for the entire design range of the flow measuring device, and record the flowrate at a daily frequency.

(7) 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.

9. 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 7 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 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. 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 7, 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; and
- (f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6.
- (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;
- (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 requires from time to time.

(6) The Owner shall, within thirty (30) calendar days of issuance of this Approval, submit a Municipal and Local Services Board Sewage Works 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.

10. 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 not permitted as part of Limited Operational Flexibility:
 - (a) Modifications to the Works that result in an increase of the approved 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.

Schedule "A"

1. Application for Approval of Municipal and Private Sewage Works dated December 9, 2009 and submitted under covering letter dated December 16, 2009 by Andrew Garland, B.A.Sc., of B.M. Ross & Associates Ltd;
2. Report titled "Township of North Huron Blyth Sewage Treatment Works Upgrades Design Brief and Notes", December 15, 2009; prepared by B.M. Ross & Associates Ltd Consulting Engineers;
3. A drawing titled "Township of North Huron Blyth STP Upgrades", dated December 15, 2009, Contract No. 1, Project No. 08117, Drawing No. M1, prepared by B.M. Ross & Associates Ltd Consulting Engineers;
4. A letter dated December 21, 2009 from Andrew Garland, B.A.Sc., of B.M. Ross & Associates Ltd, to Application Processor of the Ontario Ministry of the Environment (MOE), File No.08117; and
5. An e-mail dated January 11, 2010 from Andrew Garland, B.A.Sc., of B.M. Ross & Associates Ltd, to Youssouf Kalogo, P.Eng. of MOE.
6. Application for Approval of Municipal and Private Sewage Works dated September 25, 2002, and technical information submitted by R.J. Burnside and Associates Limited.

Schedule "B"

Limited Operational Flexibility Criteria for Modifications to Sewage Works

1. 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. Alter pumping capacity by 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 modifications do not result in an increase of the sewage treatment plant Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable.
- b. Forcemain relining and replacement with similar pipe size where the nominal diameter is not greater than 1,200 mm.

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 purposes, the following equipment can be considered under this provision: pumps, 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 and diffusers 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 1,200 mm.

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 not 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.

Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number and issuance date and notice number, which should start with "01" and consecutive numbers thereafter)

ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)
ECA Owner		Municipality

Part 2: Description of the modifications as part of the Limited Operational Flexibility

(Attach a detailed description of the sewage works)

Description shall include:

1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.)
2. Confirmation that the anticipated environmental effects are negligible.
3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:

1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
 2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA;
 3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.63 of the Ontario Water Resources Act; and other appropriate regulations.
- I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name (Print)	PEO License Number
Signature	Date (mm/dd/yy)
Name of Employer	

Part 4 – Declaration by Owner

I hereby declare that:

1. I am authorized by the Owner to complete this Declaration;
 2. The Owner consents to the modification; and
 3. This modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
 4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.
- I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name of Owner Representative (Print)	Owner representative's title (Print)
Owner Representative's Signature	Date (mm/dd/yy)

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 indicate that By-pass / Plant Overflows of untreated or partially treated sewage to the receiving watercourse is prohibited, save in certain limited circumstances where the failure to By-pass / Plant Overflow could result in greater injury to the public interest than the Bypass itself where a By-pass / Plant Overflow will not violate the approved effluent requirements, or where the By-pass / Plant 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 By-pass / Plant Overflow events.
5. Condition 5 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.
6. Condition 6 is imposed to ensure that the effluent discharged from the Works to the receiver 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.
7. Condition 7 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 Works.

8. Condition 8 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.
9. Condition 9 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.
10. Condition 10 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.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8687-826L6Z issued on February 9, 2010

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:

1. 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;
2. 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:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. 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 23rd day of February, 2016



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

YZ/
c: DWMD Supervisor, MOECC Owen Sound District Office
Rekha Chetlur, Registration and Compliance Section, MOECC Drinking Water Programs Branch – IMBS
Don Nicholson, The Corporation of the Township of North Huron