

**AMENDED CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE SEWAGE WORKS**

NUMBER 2042-8KYJH3

Issue Date: September 2, 2011

The Corporation of the Municipality of South Bruce
21 Gordon St Teeswater
Post Office Box, No. 540
South Bruce, Ontario
N0G 2S0

Site Location: Mildmay Sewage Treatment Plant
Part of Lot 24, Concession C (former Township of Carrick)
South Bruce Municipality, County of Bruce

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

Alterations to the existing municipal sewage treatment works serving the Village of Mildmay for the treatment and disposal of sewage to Otter Creek, having a *Rated Capacity* of $966 \text{ m}^3/\text{d}$ and consisting of the following *Works* :

PROPOSED WORKS**Sewage Treatment Plant****Chlorination System**

- existing chlorination system to be retained for pre-chlorination of raw sewage, if required,

UV Disinfection System

- install a riser extension to the existing outlet pipe from the outlet box in the chlorine contact chamber to serve as emergency overflow pipe;
- a 300 mm dia pipe from the existing outlet box in the chlorine contact chamber to the outdoor UV disinfection channel;
- an outdoor 5.31 m x 0.6 m x 0.9 m depth concrete channel equipped with a UV disinfection unit with a *Peak Flow Rate* of 49.1 L/s, complete with level control weir;
- a 300 mm dia outlet pipe from the UV disinfection channel to the existing outfall chamber;

EXISTING WORKS

Sewage Pumping Station (off-site)

- a prefabricated underground sewage pumping station located on the north side of Clark Street just northeast of the intersection of Clark Street and Elora Road, equipped with two (2) centrifugal vertical sewage pumps, each having a capacity of 45.5 L/s at 32.3 metres TDH;
- bypass fittings on the forcemain and provision for emergency overflow from the pumping station wet well to Otter Creek;
- one (1) diesel generator building housing a 60 kilowatt standby diesel generator;

Forcemain

- a 200 mm diameter forcemain along Clark Street and easement from the sewage pumping station to the sewage treatment plant, together with three (3) air relief valve chambers and one pump-out chamber;

Sewage Treatment Plant

- a circular extended aeration plant, with an overall diameter of 23.5 m, having annular process compartments;

Preliminary Treatment

- one (1) flowminutor with a *Peak Flow Rate* of 6,364 m³/d together with emergency bypass equipped with manually cleaned coarse bar screen;
- two (2) grit channels, each channel having dimensions of 7.6 m x 0.53 m;
- a 250 millimetre diameter bypass sewer between the exit of the grit channels and the chlorine contact chamber;

Secondary Treatment

- one (1) 962 m³ aeration tank with two compartments, having a sidewater depth (SWD) of 4.0 m and equipped with coarse bubble diffusers;
- one (1) 13.5 m diameter secondary clarifier with a SWD of 3.0 m and equipped with side feed clarifier mechanism, scum baffle, removable mechanical scum skimmer and scum air lift;
- one (1) return/waste activated sludge pump rated at 22 L/s at 2.1 m TDH;

Phosphorus Removal

- one (1) 27.3 m³ chemical storage tank with an enclosure and containment tank;
- two (2) chemical feed pumps, each with a rated capacity of 6.8 L/min. at 1,000 kPa for

addition of phosphorus removal chemicals to the headworks or to the entry or exit of the aeration tank;

Chlorination System

- one (1) 28 m³ chlorine contact chamber with bypass and V-notch measuring weir;
- one (1) 45.4 kg/d gas chlorinator for effluent disinfection and if required, pre-chlorination of raw sewage;
- one (1) ultrasonic water level monitor in the chlorine contact chamber, connected to a level/flow integrator and flow recorder;
- one (1) controller taking a signal from the final effluent level/flow integrator to control a water supply flow to the chlorinator for the preparation of chlorine solution to be added to the chlorine contact chamber for disinfection of secondary treated effluent;

Blower Room

- three (3) air blowers, each with a rated capacity of 12.2 m³/min. at 55.2 kPa;

Sludge Stabilization

- one (1) two-stage aerobic digester having a volume of 97 m³ in the first stage and 48 m³ in the second stage, and equipped with a coarse bubble diffuser system and a decanting facility;
- one (1) blower with a capacity of 20.1 m³/min. at 60 kPa;

Sludge Storage

- a 466 m³ sludge holding tank equipped with one (1) submersible mixer, a diffused aeration system and decanting device;
- one (1) submersible sludge loading pump rated at 23 L/s at 15.4 m TDH;

Standby Power

- one (1) 75 kW diesel generator set and one (1) 909 L fuel tank;

Scum Well

- a scum well equipped with one (1) submersible pump rated at 3 L/s at a 5.2 m TDH;

Brewery Waste Holding Tank

- a brewery waste holding tank equipped with one (1) submersible pump rated at 3 L/s at a 5.2 m TDH;

Outfall

- one (1) 279 millimetre outside diameter polyethylene outfall sewer complete with outfall headwall, discharging to Otter Creek;

Miscellaneous

- all other controls, electrical equipment, instrumentation, piping, pumps, valves, heating and ventilation systems and appurtenances essential for the proper operation of the aforementioned *Works* ;

all in accordance with the following submitted supporting documents:

1. Final plans and specifications prepared by Proctor & Redfern Limited, Consulting Engineers, dated 1976;
2. Application for Approval of Municipal and Private Sewage Works dated March 29, 2007, and accompanying cover letter with attachments submitted by S.D. Burns of B. M. Ross and Associates Limited, dated April 17, 2007;
3. Application for Approval of Municipal and Private Sewage Works submitted by Kim Van Andel of Genivar received July 26, 2011, including design brief and engineering plans and specification.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

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

"*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 any discharge from the *Works* that does not undergo any treatment or only receives partial treatment before it is discharged to the environment;

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

"*Certificate* " means this entire certificate of approval document, issued in accordance with Section 53 of the *Act* , and includes any schedules;

"*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 any *Ministry* employee appointed by the Minister pursuant to section 5 of the *Act* ;

"*District Manager* " means the District Manager of the Owen Sound Area Office of the *Ministry* ;

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

"*Existing Works* " means those portions of the sewage works previously constructed and existing on-site on the date of issuance of this *Certificate* ;

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

"*Ministry* " means the Ontario Ministry of the Environment;

"*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;

"*Owner* " means The Corporation of the Municipality of South Bruce and includes its successors and assignees;

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

"*Proposed Works* " means the sewage works described in the *Owner* 's application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* ;

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

"*Regional Director* " means the Regional Director of the Southwestern Region of the Ministry;

"*Substantial Completion* " has the same meaning as "*substantial performance* " in the Construction Lien Act; and

"*Works* " means the sewage works described in the *Owner* 's application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* and includes both *Existing Works* and *Proposed Works* .

You are hereby notified that this 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 *Certificate* 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 *Certificate*, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate*.
- (3) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate*, the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.
- (4) Where there is a conflict between the listed 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 requirements of this *Certificate* are severable. If any requirement of this *Certificate*, or the application of any requirement of this *Certificate* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this certificate shall not be affected thereby.
- (6) The approval granted by this *Certificate* is based upon a review of the *Works* in the context of its effect on the environment, its process performance and general principles of wastewater engineering. The review did not include a consideration of the architectural, mechanical, electrical or structural components and minor details of the *Works* except to the extent necessary to review the *Works*.

2. EXPIRY OF APPROVAL

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

3. CHANGE OF OWNER

(1) The *Owner* shall notify the *District Manager* and the *Director*, in writing, of any of the following changes within 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 *District Manager* ;

(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 *District Manager* ;

(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 *Certificate* , and a copy of such notice shall be forwarded to the *District Manager* and the *Director* .

4. UPON THE SUBSTANTIAL COMPLETION OF THE WORKS

(1) Upon the *Substantial Completion* of the *Works* , the Owner shall prepare a statement, certified by a Professional Engineer, that the works are constructed in accordance with this *Certificate* , and upon request, shall make the written statement available for inspection by Ministry personnel.

(2) Within six months 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. BY-PASSES

(1) Any *By-pass* of sewage from any portion of the *Works* is prohibited, except where:

(a) it is necessary to avoid loss of life, personal injury, danger to public health or severe property damage;

(b) the *District Manager* agrees that it is necessary for the purpose of carrying out essential maintenance and the *District Manager* has given prior written acknowledgment of the *by-pass* ;
or

(c) the *Regional Director* has given prior written acknowledgment of the *By-pass* .

(2) The *Owner* shall collect at least one (1) grab sample of the *By-pass* and have it analyzed for the parameters outlined in Condition 7 using the protocols in Condition 9.

(3) The *Owner* shall maintain a logbook of all *By-pass* events which shall include, at a minimum, the time, location, duration, quantity of *By-pass* , the authority for *By-pass* pursuant to subsection (1), and the reasons for the occurrence.

(4) The *Owner* shall, in the event of a *By-pass* event pursuant to subsection (1), disinfect the by-passed effluent prior to it reaching the receiver such that the receiver is not negatively impacted.

6. 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)
Column 1	Column 2
<i>CBOD5</i>	15
Total Suspended Solids	15
Total Phosphorus	0.8
Total Ammonia Nitrogen	3.0
Total Residual Chlorine	0.2*
<i>E. Coli</i>	150 organisms per 100 mL** (monthly <i>Geometric Mean Density</i>)

* Effluent objective applies during the period of May 1 to October 31 of each calendar year prior to commissioning of the UV disinfection system

** Effluent objective applies during the period of May 1 to October 31 of each calendar year prior to commissioning of the UV disinfection system and throughout the year after commissioning of the UV disinfection system

(2) The *Owner* shall use best efforts to:

(a) maintain the pH of the effluent from the *Works* within the range of 6.5 - 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 10 a summary of the efforts made and results achieved under this Condition.

7. EFFLUENT LIMITS

(1) The *Owner* shall design and construct the *proposed works* and 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 1 - Effluent Limits	
Effluent Parameter	Monthly Average Concentration (milligrams per litre unless otherwise indicated)
Column 1	Column 2
<i>CBOD5</i>	25
Total Suspended Solids	25
Total Phosphorus	1.0
Total Ammonia Nitrogen	8.0
Total Residual Chlorine	0.35*
<i>E. Coli</i>	200 organisms per 100 mL** (monthly <i>Geometric Mean Density</i>)
pH of the effluent maintained between 6.0 to 9.5, inclusive, at all times	

* Effluent limit applies during the period of May 1 to October 31 of each calendar year prior to commissioning of the UV disinfection system

** Effluent limit applies during the period of May 1 to October 31 of each calendar year prior to commissioning of the UV disinfection system and throughout the year after commissioning of the UV disinfection system

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

(a) The *Monthly 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 within the limits outlined in subsection (1), at all times.

(3) Notwithstanding subsection (1), the *Owner* shall operate and maintain the *Works* such that the effluent is continuously disinfected during the period noted in Table 1 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 effluent limits shall apply upon issuance of the *Certificate*.

8. 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 *Certificate* 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 *Certificate* 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 six (6) months 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 *District Manager* ; and
- (f) procedures for receiving, responding and recording public complaints, including recording any followup 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.

9. 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 *Certificate* 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) Weekly means once each week;
- (b) Bi-Weekly means once every two weeks;
- (c) Monthly means once every month;
- (d) Quarterly means once every three months;
- (e) Annually means once every year.

(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 - Raw Sewage Monitoring - (at treatment plant inlet)	
Frequency	Monthly
Sample Type	Composite
Parameters	<i>BOD5</i> , Total Suspended Solids, Total Phosphorus, Total Kjeldahl Nitrogen

Table 4 - Final Effluent Monitoring		
Parameters	Sample Type	Frequency
<i>CBOD5</i>	Composite	Bi-Weekly
Total Suspended Solids	Composite	Bi-Weekly
Total Phosphorus	Composite	Bi-Weekly
Total Kjeldahl Nitrogen	Composite	Bi-Weekly
Total Ammonia Nitrogen	Composite	Bi-Weekly
Nitrite	Composite	Bi-Weekly
Nitrate	Composite	Bi-Weekly
Total Residual Chlorine	Grab	Daily*
<i>E. Coli</i>	Grab	Weekly**
Acute Lethality to Rainbow Trout and <u>Daphnia magna</u>	Grab	Quarterly
pH	Grab	Bi-Weekly
Temperature	Grab	Bi-Weekly

* Total Residual Chlorine monitoring applies during the period of May 1 to October 31 of each calendar year prior to commissioning of the UV disinfection system

** *E. Coli* monitoring applies during the period of May 1 to October 31 of each calendar year prior to commissioning of the UV disinfection system and throughout the year after commissioning of the UV disinfection system

(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;

(d) the Environment Canada publications "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" (July 1990) and "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Daphnia magna" (July 1990), 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. The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended, for ammonia (un-ionized).

(6) If any effluent sample indicates acute lethality to Rainbow Trout or *Daphnia magna*, the *Owner* shall carry out the following:

(a) review the following:

- (i) effluent quality and confirm that concentrations of ammonia in the acutely lethal effluent are within the limits;
- (ii) plant operations around the time of the toxicity event; and
- (iii) all data available regarding plant operations and effluent quality.

If the observed effluent toxicity is not associated with ammonia, an investigation should be undertaken to determine the cause or source of the toxicity.

b) Upon determination of cause or source of acute lethality to rainbow trout and *Daphnia magna*, the *Owner* shall determine appropriate control measures to achieve non-acutely lethal effluent and time lines for the implementation of identified control measures. The *Owner* shall submit the proposed control measures and implementation time lines for approval to the *District Manager*.

(7) The monitoring frequency specified in subsection (3) Table 4 in respect of Acute Lethality to Rainbow Trout and *Daphnia Magna* may, after eight (8) consecutive quarters of monitoring results not indicating acute lethality, be reduced to annually.

(8) The *Owner* shall install and maintain 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.

10. REPORTING

(1) One week prior to the start up of the operation of the *Proposed Works*, the *Owner* shall notify the *District Manager* (in writing) of the pending start up date.

(2) 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 *District Manager* (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* .

(3) The *Owner* shall report to the *District Manager* 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.

(4) In addition to the obligations under Part X of the Environmental Protection Act, the *Owner* shall, within 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 *District Manager* 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.

(5) The *Owner* shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to *Ministry* staff.

(6) The *Owner* shall prepare, and submit to the *District Manager*, a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The 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; and

(j) any other information the *District Manager* requires from time to time.

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 *Certificate* 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 *Certificate* the existence of this *Certificate* .
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 *Certificate* 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 is included to indicate that by-passes of untreated sewage to the receiving watercourse is prohibited, save in certain limited circumstances where the failure to *By-pass* could result in greater injury to the public interest than the *By-pass* itself where a *By-pass* will not violate the approved effluent requirements, or where the *By-pass* 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* events.
6. Condition 6 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 7 is imposed to ensure that the effluent discharged from the *Works* to Otter Creek 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 8 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 9 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 *Certificate* and that the *Works* does not cause any impairment to the receiving watercourse.
10. Condition 10 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 *Certificate*, so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 7309-73XQFQ issued on July 24, 2007.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, 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 101 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the 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.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

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, 15th Floor
Toronto, Ontario
M5G 1E5

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 2nd day of September, 2011

A handwritten signature in black ink, appearing to read 'Ian Parrott', with a long horizontal flourish extending to the right.

Ian Parrott, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

FL/

c: District Manager, MOE Owen Sound
Kim Van Andel, GENIVAR Inc.
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