Ontario

Ministry of the Environment
Ministère de l'Environnement

**ENVIRONMENTAL COMPLIANCE APPROVAL**
NUMBER 0279-8Q8JD6
Issue Date: February 8, 2012

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

Site Location: Teeswater and Formosa Sewer System and
Teeswater Wastewater Treatment Plant
254 Sideroad 10A, Teeswater (South Bruce)
Bruce County, Ontario

*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:*

Establishment of municipal sewage *works* at the above site location for the collection, transmission, treatment and disposal of sewage to service Teeswater and Formosa in South Bruce, including a sewage treatment plant having a *Rated Capacity* of 1,350 $m^3$/d, and consisting of the following:

**Formosa Gravity Sanitary Sewers**

| Street | From | To |
|---|---|---|
| Bruce County Road 12 | 202 m North of Council Road | 390 m South of Council Road |
| Kuntz Drive | Bruce County Road 12 | 130 m W of Bruce County Road 12 |
| Council Road | Council Road | 90 m East of Bruce County Road 12 |

**Formosa Low Pressure Sanitary Sewer System**

- low pressure sewers with connections serviced by grinder pumps on individual service locations:

| | | |
|---|---|---|

| Street | From | To |
|---|---|---|
| Bruce County Road 12 | 225 m North of Willmar Drive | 202 m North of Council Road |
| Willmar Drive | Bruce County Road 12 | Concession 12 |
| Concession 12 | Bruce County Road 12 | 125 m East of Willmar Drive |
| Convent Street | Bruce County Road 12 | 160 m East of Bruce County Road 12 |
| Community Drive | St. Ann Street | Bruce County Road 12 |
| Doris Drive | St. Ann Street | 195 m South of St. Ann Street |
| St. Ann Street | Bruce County Road 12 | 510 m West of Doris Drive |
| Council Road | 390 m East of Maple Street | 174 m West of Maple Street |
| Maple Street | Council Road | 140 m South of Council Road |

**Teeswater Gravity Sanitary Sewers**

| Street | From | To |
|---|---|---|
| Mitchell | Reid | Clinton |
| Logan | Reid | Thomas |
| Anne | Thomas | Clinton Street North |
| Anne | Clinton Street North | Wall |
| Isabella | Wall | Mill |
| Hillcrest | 240 m West of Andrew | Janet |
| Hillcrest | Janet | 22 m East of Elizabeth Street |
| Hillcrest | 22 m East of Elizabeth Street | 32 m East of Elizabeth Street |
| Hillcrest | 32 m East of Elizabeth Street | SPS |
| Hillcrest | 73 m East of Riverview Terrace | SPS |

| | | |
|---|---|---|

| Street | From | To |
|---|---|---|
| Union | Janet | Elizabeth |
| Union | Elizabeth | 70 m East of Clarinda |
| James | Janet | 40 m East of Clarinda |
| Marcy | Janet | 50 m East of Clarinda |
| Gordon | 100 m West of Brownlee | 200 m East of Clarinda |
| Wragge | Brownlee | 100 m East of Shannon |
| Cassidy | Brownlee | Clinton |
| Industrial Road | Clinton | 250 m South East of Clinton |
| Railway | Clinton | Shannon |
| Reid | Mitchell | Logan |
| Wright | Mitchell | Logan |
| Heysham | Mitchell | 75 m South of Logan |
| Thomas | Mitchell | Ann |
| Clinton (North) | 200 m North of Mitchell | Hillcrest |
| Wall | Ann | Isabella |
| Mill | Isabella | Hillcrest |
| Andrew | Hillcrest | 340 m Northwest of Hillcrest |
| Janet | Hillcrest | Marcy |
| Brownlee | Hillcrest | Cassidy |
| Clinton (South) | Hillcrest | Railway |
| Clinton (South) | Railway | 300 m South of Railway |
| Elizabeth | Hillcrest | Union |
| Elizabeth | Wragge | Wragge |

| Street | From | To |
|---|---|---|
| Clarinda | Union | Wragge |
| Shannon | Wragge | Railway |
| Riverview Terrace | Hillcrest | 100 m South of Hillcrest |

**Formosa Storm Sewers**

| Street | From | To |
|---|---|---|
| Kuntz Drive | Bruce County Road 12 | end of Kuntz Drive |
| Maple Drive | Council Road | end of Maple Drive |
| Bruce County Road 12 | Kuntz Drive | existing ditch outlet |

**Teeswater Local Sewage Pumping Stations**

- SPS A1 located at the intersection of Reid Street and Logan Street, a duplex E-One grinder pump station with duty point at 0.69 L/s at 28 m TDH and a 50 mm dia forcemain along Logan Street to a maintenance hole east of Wright Street;
- SPS A2 located at the end of Riverview Terrace, a duplex E-One grinder pump station with duty point at 0.69 L/s at 28 m TDH and a 50 mm dia forcemain along Riverview Terrace to a maintenance hole on Hillcrest Street E;
- SPS A3 located at the end of Andrew Street, a duplex pump station with grinder style centrifugal sewage pumps with duty point at 3.97 L/s at 17.4 m TDH and a 75 mm dia forcemain along Andrew Street to a maintenance hole on Hillcrest Street W;

**Teeswater Main Sewage Pumping Station**

- a wet well/dry well style sewage pumping station located at the northwest corner of Mill Street and Hillcrest Street East, and equipped with two (2) submersible pumps (one standby), each rated at 65 L/s at a TDH of 38.6 m;
- a backup generator, flow meter, bypass piping and alarms;
- a 300 mm diameter sanitary forcemain along Hillcrest Street East from the pumping station to Teeswater Wastewater Treatment Plant;

**Formosa Sewage Pumping Station**

- a 3.0 m diameter precast concrete wet well sewage pumping station, located on the east side of Bruce Road No. 12 approximately 150 m south of Council Road, and equipped with two (2) submersible pumps, each rated at 23 L/s at a TDH of 56.0 m;
- a backup generator, flow meter, bypass piping and alarms;
- a 200 mm diameter sanitary forcemain along Bruce Road 12, Concession 10, Sideroad 1B and Concession Road 8 from the pumping station to a grit removal chamber which discharges to a 300 mm/250 mm diameter gravity sewer along Concession Road 8, followed by a 250 mm/200 mm diameter sag sewer along Concession Road 8, with intermediate flush chambers, followed by a 250 mm diameter gravity sewer along Concession Road 8, followed by a second 250 mm/200 mm diameter sag sewer along Concession 8 and Sideroad 10A with intermediate flush chambers, followed by a 250 mm diameter gravity sewer along Sideroad 10A and finally discharges to the on-site sewage pumping station at the wastewater treatment plant;

**Teeswater Sewage Treatment Plant**

**Influent Works**

- one (1) 600 mm wide and 1,300 mm deep screen channel equipped with a mechanically cleaned, 3 mm diameter perforated plate debris screen rated at 110 L/s and a bypass channel with overflow weir;
- one (1) 2.0 m diameter circular vortex grit removal unit rated with a *peak flow rate* of 110 L/s, and equipped with a grit removal system;
- one (1) screw conveyor grit classifier serving the grit removal unit;
- one (1) 8,900 L capacity alum solution storage tank, together with two (2) chemical metering pumps (one standby) each rated at 0 to 10 L/h, with an alum solution feed line to grit tank outlet channel;

**Secondary Treatment Facilities**

- a 350 mm diameter inflow pipe connected to an influent splitter box designed to distribute the influent sewage evenly between two sequential batch reactors (SBR);
- two (2) 29.5 m long x 10.5 m wide x 6.4 m deep parallel continuous inflow SBR with a baffle wall at the upstream end of each tank to direct all influent into bottom of the tank and equipped with fine bubble aeration system;
- one (1) motorized effluent decanter rated at 196 L/s peak rate for each SBR with, a fixed float scum guard, and discharging into a 26.7 m by 4 m equalization tank.;
- two (2) submersible centrifugal waste activated sludge pumps for each SBR, each rated at 29 $m^3$ /h at a TDH of 8.0 m, with discharge line to the sludge digestion facility;

**Air Blowers**

- three (3) positive displacement air blowers (one standby) serving as the compressed air supply for the SBR aeration system and sludge digestion system, each rated at 1860 $m^3$/h at 69 kPa;

**Effluent Filtration Systems**

- six (6) deep bed, continuous backwash effluent filters with total surface area of 27.87 $m^2$ rated at 3.3 L/$m^2$/s for *Peak Flow Rate* of 92 L/s.
- a 200 mm diameter inlet magmeter to allow supplementary flow-proportional chemical dosing to the filters;
- one (1) 4,400 L chemical storage tank and two dosing pumps (one standby) to the inlet pipe to filters, each with a capacity range of 0 L/h to 10 L/h;
- one (1) 2.4 $m^3$ flocculation (mixing chamber) ahead of filters equipped with variable speed, 5 hp mixer;
- two (2) submersible, 7.5 hp well-type pumps each rated at 5 L/s at 73.7 m TDH for effluent water reuse in the headworks;

**Effluent Disinfection Facilities**

- a 4.41 m long x 406 mm wide x 780 mm deep indoor UV disinfection channel, equipped with a UV disinfection unit with a *peak flow rate* of 152 L/s, complete with level control serpentine weir;

**Plant Effluent Outfall Sewer**

- a 525 mm diameter outfall sewer to Teeswater River;

**Sludge Digestion and Storage Facilities**

- one (1) 550 $m^3$ stage 1 sludge digestion tank and one (1) 245 $m^3$ stage 2 digestion tank, complete with aeration systems and decant assemblies;
- two (2) submersible centrifugal waste activated sludge pump rated at 29 $m^3$/h at a TDH of 15 m in digester 2, one for truck loading and for discharge to the sludge storage facilities;
- one (1) 4478 $m^3$ capacity thickened sludge holding tank with cover;
- one (1) 20 hp sludge mixer and an additional second mixer as required;

**Emergency Power Supply System**

- one (1) 360 kW diesel engine standby power generator with integral fuel storage.

**On-Site Wastewater Pumping Station**

- an on-site wastewater pumping station equipped with two (2) 20 hp solids chopping centrifugal submersible sewage pumps (one standby), each rated at 33 L/s at 20 m TDH for pumping Formosa sewage, septage, filter backwash, domestic sewage and digester decant to inlet works;

**Miscellaneous**

- all appurtenances, piping, heating and ventilation systems, alarms, controls, and electrical and instrumentation systems necessary for operating the *Works* .

all in accordance with the submitted supporting documents listed in Schedule A.

*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;

*"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 $TBOD_5$) 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 receives only partial treatment before it is discharged to the environment;

"*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;*

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

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

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

"*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 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;

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

"*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 *Approval* and in the supporting documentation referred to herein, to the extent approved by this *Approval.*

*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.

(6) The approval granted by this *Approval* 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

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 *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 *Approval,* 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 *Approval* , and upon request, shall make the written statement available for inspection by Ministry personnel.

(2) Within six months of the *Substantial Completion* of the *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) |
|---|---|
| *CBOD5* | 5.0 |
| Total Suspended Solids | 5.0 |
| Total Phosphorus | 0.1 |
| Total Ammonia Nitrogen | 1.0 (May 1 to Nov 30)<br>2.0 (Dec 1 to Apr 30) |
| *E. Coli* | 80 organisms per 100 mL<br>Monthly *Geometric Mean Density* |

(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 *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 2 - Effluent Limits** | |
|---|---|
| **Effluent Parameter** | **Average Concentration** (milligrams per litre unless otherwise indicated) |
| Column 1 | Column 2 |
| *CBOD5* | 10.0 |
| Total Suspended Solids | 10.0 |
| Total Phosphorus | 0.15 |
| Total Ammonia Nitrogen | 2.0 (May 1 to Nov 30)<br>4.0 (Dec 1 to Apr 30) |
| pH of the effluent maintained between 6.0 to 9.5, inclusive, at all times | |

(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 subsections (1) to (3), 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 100 organisms per 100 millilitres of effluent discharged from the *works* .

(4) The effluent limits set out in this condition shall apply upon the issuance of this *Approval.*

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 *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 or update the operations manual within six (6) months of *Substantial Completion* of the *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 *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) Weekly means once each week;

(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 | | |
|---|---|---|
| **Parameters** | **Sample Type** | **Frequency** |
| $BOD_5$ | Composite | Weekly |
| Total Suspended Solids | Composite | Weekly |
| Total Kjeldahl Nitrogen | Composite | Weekly |
| Total Phosphorus | Composite | Weekly |

| **Table 4 - Effluent Monitoring**<br>(Sampling point at the outlet of the treatment plant or at the outfall sewer as close as possible to the treatment plant) | | |
|---|---|---|
| **Parameters** | **Sample Type** | **Frequency** |
| $CBOD_5$ | Composite | Weekly |
| Total Suspended Solids | Composite | Weekly |
| Total Ammonia Nitrogen | Composite | Weekly |
| Nitrate Nitrogen | Composite | Weekly |
| Total Phosphorus | Composite | Weekly |
| *E. Coli* | Grab | Weekly |
| Dissolved Oxygen | Grab | Weekly |
| pH | Grab | Weekly |
| Temperature | Grab | Weekly |
| Unionized Ammonia | Calculated | 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" (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; and,

(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) 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.

10. REPORTING

(1) One week prior to the start up of the operation of the *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 after the laboratory results of the exceedance have been received.

(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; and

(i) a summary of all *By-pass* , spill or abnormal discharge events.

*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 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 6 are exceeded.

7. Condition 7 is imposed to ensure that the effluent discharged from the *Works* to the Teeswater River 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 *Approval* 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 *Approval,* so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

**Schedule A**

1. Application for Approval of Sewage Works submitted by Kim Van Andel of GENIVAR Inc. received on August 31, 2011, including Background Water Quality and Assimilative Capacity Assessment of Teeswater River, Design Brief, final engineering plans and specifications;
2. Additional storm sewer engineering plans received on December 14, 2011;
3. Revised sections of design brief and revised engineering plans received on Jan 19, 2012.

*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.

*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
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) 212-6349, Fax: (416) 314-4506 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 8th day of February, 2012

Ian Parrott, P.Eng.
Director
appointed for the purposes of Part II.1 of the
*Environmental Protection Act*

FL/
c: District Manager, MOE Owen Sound
Water Standards Section, MOE Standards Development Branch
Kim Van Andel, GENIVAR Inc.