AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 6575-AFTK6S
Issue Date: February 27, 2017

The Corporation of the City of Owen Sound
808 2nd Ave E
Owen Sound, Ontario
N4K 2H4

Site Location: Owen Sound Wastewater Treatment Plant
2050 Third Ave E
City of Owen Sound, County of Grey

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:

Upgrades and modifications to an existing municipal sewage works, having a Rated Capacity of 24,545 cubic metres per day and a Peak Daily Flow Rate of 65,000 cubic metres per day, (NAD83: UTM Zone 17: 505384 m E, 4936780 m N), serving the City of Owen Sound through the collection, transmission, treatment and subsequent disposal of sanitary sewage to Owen Sound Bay, consisting of the following:

PROPOSED WORKS:

Screening System

- Two (2) 12 mm spacing vertical bar screens designed to handle peak daily flows;
- Raise the top of the influent screening channels to prevent bypassing over the screens;

Odour Control System

- One (1) influent blower with a capacity of 2,900 L/s to draw odorous air from existing headworks screening room and wet well;
- One (1) odour control biofilter unit containing inorganic biofilter media, with stack venting to the atmosphere;

Primary Treatment

- Helical scum skimmer system installed across the full width of the primary clarifiers with the top lip located above the water surface level, equipped with a spiral rotating blade system conveying scum to the scum collection hopper;

- Four (4)14.2 L/sec @16 m TDH rated capacity chopper type scum pumps, two (2) pumps per hopper (one duty, one standby);

- Two (2) 7.0 m^3/min @ 27.6 kPa capacity positive displacement lobe blowers (one duty, one standby);

Secondary Treatment System (Biological Aerated Filter - BAF)

- One (1) 7.1 m long x 10.4 m wide x 5.6 m deep primary effluent wet well with one (1) 10.4 m x 2.5 m deep dry pit housing two (2) 650 L/sec @ 11.1 m TDH and two (2) 160 L/sec @ 11.1 m TDH rated capacity centrifugal type primary effluent pumps (three duty, one standby);

- Six (6) parallel Biological Aerated Filtration (BAF) cells (five BAF cells on duty, one BAF cell on backwash mode), each with approximate dimensions of 6.3 m wide x 10.3 m long x 6.4 m deep, media depth of 3.5 m, and media size of 4.0 mm, providing a surface area of 390 m^2, designed to operate at CBOD5 peak monthly loading (PML) rate of 1.62 kg/m^3/day, CBOD5 peak daily loading (PDL) rate of 2.30 kg/m^3/day, and a daily average hydraulic loading rate of 3.0 m^3/m^2/hr;

- One (1) 906 m^3 capacity BAF backwash residuals holding tank having an approximate dimension of 11.8 m long x 14.9 m wide x 5.8 m deep, equipped with one (1) 79 L/sec @ 9 m TDH capacity submersible transfer pump used to convey residuals to the primary treatment system;

- One (1) 922 m^3 capacity BAF backwash residuals holding tank having an approximate dimension of 11.8 m long x 14.9 m wide x 5.8 m deep, equipped with two (2) 79 L/sec @ 9 m TDH capacity submersible transfer pump (one duty, one standby) used to convey residuals to the primary treatment system;

- Three (3) 2,474 Nm^3/hr @ 102 kPa capacity 150 hp VFD turbo process air blowers (two duty, one standby);

Chemical Storage System

- One (1) 32.9 m^3 capacity ferric chloride solution storage tank equipped with two (2) 6 L/min chemical metering pumps (one duty, one standby);

- Two (2) 3.785 m^3 capacity sodium hypochlorite solution storage tanks equipped with chemical metering pumps providing sodium hypochlorite solution to the disinfection system described below;

Effluent Disinfection System

- One (1) chlorine disinfection system designed to provide adequate disinfection up to the Peak Design Flow of the Wastewater Treatment Plant, which includes two (2) 4.17 L/min capacity dosing pumps operating in a duty/standby configuration supplying sodium hypochlorite to the BAF facility under normal operating conditions, and one (1) 1.73 L/min dosing pump providing disinfection for the effluent disinfection chlorine contact chamber in the event of a secondary treatment bypass, or to outfall OUT-CH2 structure in the event of a headworks bypass or BAF backwash residual tank overflow;

- Two (2) calcium thiosulphate storage tanks and two (2) chemical metering pumps (one duty, one standby) for secondary effluent dechlorination;

Outfall

- One (1) 35 m long effluent outfall diffuser consisting of six (6) 300 mm diameter horizontal ports and two (2) 450 mm diameter horizontal ports with isolation valves located approximately 0.5 m above lake bottom;

Sludge Management

- One (1) 1,428 m^3 storage capacity thermophilic anaerobic digester normally operating at 500 ^{0}C to 600 ^{0}C range with an approximate inside diameter of 15.0 m and 7.75 m SWD with a concrete roof and a hydraulic mixing system, equipped with the appurtenances including three (3) 14.2 L/sec @ 16 m TDH capacity chopper type sludge recirculation pumps (two duty, one standby) servicing the anaerobic digester;

- One (1) 872 L/min hot/cold side flow capacity digester heat exchanger serving the proposed anaerobic digester;

- One (1) 349 L/min hot/cold side flow capacity heat recovery heat exchanger serving the proposed anaerobic digester;

- One (1) 872 L/min hot/cold side flow capacity digester heat exchanger serving the existing digester;

- Two (2) water tube boilers (one (1) duty boiler that operates on digester gas or natural gas, one (1) standby boiler that operates on natural gas only) and associated appurtenances;

- Two (2) 14.2 L/sec @ 24.4 m TDH capacity biosolids transfer pumps;

- One (1) 5,088 m^3 capacity partially below ground biosolids storage tank with approximate dimensions of 11.3 m (7.3 m high above ground level and 4.0 m deep below ground level) x 23.9 m diameter, equipped with a dome cover and hydraulic mixing system, equipped with two (2) 298 L/sec @ 10.6 m TDH capacity chopper type pumps for sludge mixing and transfer (one duty, one standby);

- Two (2) 158 L/sec @ 10.6 m TDH capacity chopper type pumps for sludge mixing and transfer of the approximately 2,000 m^3 biosolids storage tank (one duty, one standby);

- One (1) sludge truck loading station for transferring liquid biosolids to agricultural fields;

- Two (2) 15.8 L/sec @ 7.8 m TDH capacity centrifugal decant sump pumps (one duty, one standby);

Standby Power

- One (1) 1000 kW capacity standby diesel generator set and one (1) 7,570 L minimum capacity diesel fuel storage tank, to be located within a sound attenuated enclosure near the main electrical substation; and

Miscellaneous

- Two (2) 15.8 L/sec @ 65 m TDH capacity centrifugal effluent water pumps (one duty, one standby);

- One (1) 3.15 L/sec @ 60 m TDH capacity vertical multistage effluent water pump;

- Including all controls and associated appurtenances.

STORMWATER MANAGEMENT SYSTEM

Establishment of a stormwater management system for the collection, conveyance and quality control of stormwater runoff from a 3.62 ha drainage area of the Owen Sound Sewage Treatment Plant for storm events up to and including 1:100 year return frequency, discharging to the Georgian Bay shorelines, consisting of the following:

- A network of storm sewers servicing the developed and paved areas of the site consisting of one (1) approximately 30 m long 250 mm diameter sewer, two (2) approximately total length of 55.5 m 300 mm diameter sewers, and three (3) approximately 124.7 m long 375 mm diameter sewers,

- One (1) oil and grit separator with a 3,000 L sediment and 915 L oil storage capacity (total of 4,020 L storage capacity), designed for quality control of the 1:5 year return frequency rainfall events prior to discharging to the Owen Sound Bay.

- One (1) approximately 49 m long triangular vegetated swale with 0.5 m depth and 3H:1V side slopes and two (2) approximately 248 m long trapezoidal vegetated swales with 0.6 m bottom depth and 0.5 m depth, and 3H:1V side slopes, servicing approximately 0.37 ha drainage area located on the north and west side of the site, discharging through one (1) 450 mm diameter corrugated steel pipe (CSP) culvert (**Bay Outlet #4**) to Owen Sound Bay shoreline;

- Four (4) approximately 178 m long trapezoidal vegetated swales with 0.6 m bottom depth and 0.5 m depth, and 3H:1V side slopes and one (1) approximately 42 m long triangular vegetated swale with 0.5 m depth and 3H:1V side slopes, servicing approximately 0.38 ha drainage area located on the west side of the site including landscaped area, parking lot and access road south and west of the primary clarifiers, discharging through one (1) 525 mm diameter corrugated steel pipe (CSP) culvert (**Bay Outlet #3**) to Owen Sound Bay shoreline;

- One (1) approximately 121 m long trapezoidal vegetated swale with 0.6 m bottom depth and 0.5 m depth, and 3H:1V side slopes and one (1) approximately 52 m long triangular vegetated swale with 0.5 m depth and 3H:1V side slopes, servicing approximately 0.22 ha drainage area located on the south side of the site, discharging through one (1) 450 mm diameter corrugated steel pipe (CSP) culvert (**Bay Outlet #1**) to Owen Sound Bay shoreline;

- Two (2) approximately 93 m long triangular vegetated swales with 0.5 m depth and 3H:1V side slopes, servicing approximately 0.5 ha landscaped drainage area located in the centre of site, discharging through a ditch outlet to an existing central ditch and eventually to the Owen Sound Bay shoreline;

- Two (2) approximately 121 m long trapezoidal vegetated swales with 0.6 m bottom depth and 0.5 m depth, and 3H:1V side slopes, servicing approximately 0.43 ha landscaped drainage area located in the centre of site, discharging through a ditch outlet to an existing central ditch and eventually to the Owen Sound Bay shoreline;

- Sheet flows from the remaining drainage area of the site discharging through vegetated perimeter berm to an existing central ditch and eventually to the Owen Sound Bay shoreline;

- Including all controls and associated appurtenances.

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

PREVIOUS WORKS **APPROVED ON NOVEMBER 28, 2008 UNDER ECA No. 8788-7L2KAW*:***

Screening System

Construction of a new screen complex building housing a new automatically cleaned bar screening system to replace the existing manually cleaned bar screen unit located in the existing Influent Raw Sewage Pumping Station, consisting of the following:

- Influent overflow chamber;

- One (1) screw type washer compactor;

Raw Sewage Pumping Station

Construction of a new raw sewage pumping station located in the screen complex building to replace the

existing raw sewage pumping station, having a hydraulic capacity of 82,537 cubic metres per day, consisting of the following:

- One (1) 12.2 metres by 6.45 metres wet well complete with ultrasonic level measuring transducers, back-up pump control and alarm float switches and associated ventilation;

- One (1) 12.2 metres by 9.85 metres pump room/dry well housing three (3) pumps all equipped with variable frequency drives (VFD), two (2) of pumps each rated at a capacity of 955 litres per second to establish a firm peak flow capacity of 955 litres per second and the other one (1) pump having a rated capacity of 250 litres per second;

- One (1) sump pump with a rated capacity of 5 litres per second in the pump room/dry well;

- One (1) 600 millimetre diameter discharge forcemain;

- One (1) control room housing MCC and control panel

Grit Removal Facilities

Construction of a new grit removal complex, consisting of the following:

- Two (2) vortex grit removal chambers each with hydraulic peak flow capacity of 500 litres per second complete with grit extraction equipment and blowers and a grit dewatering screw;

- Two (2) sump pumps each with a rated a capacity of 7.3 litres per second;

- One (1) control room housing MCC and control panel;

Standby Power

- Installation of one (1) standby diesel generator set rated at 500 kilowatts to provide emergency standby power for the Screening System, Raw sewage Pumping Station, and Grit Removal Facilities;

- Including all controls and associated appurtenances.

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

PREVIOUS WORKS **APPROVED ON MAY 5, 2008 UNDER ECA No. 3256-766QEV:**

Primary Treatment

A primary clarification system that provides an overflow rate of 0.45 litres per square metre per second at the *Peak Flow Rate* of 49,090 cubic metres per day and an hydraulic retention time of 1.35 hours at the total installed peak hourly hydraulic capacity of 82,537 cubic metres per day, including:

- Four (4) rectangular tanks, two of which (Nos. 1 and 2) have dimension of 23.7 metres long by 9.8 metres wide by 3.7 metres liquid depth with a combined surface area of 465 square metres, each equipped with two (2) effluent launders, and two newer tanks (Nos. 3 and 4) each having dimensions of 40.6 metres long by 9.8 metres wide by 3.7 metres liquid depth with a combined surface area of 790 square metres, each equipped with three (3) effluent launders;

- Sludge collection by chain and flight longitudinal and cross collectors;

- Three (3) plunger-type raw sludge pumps, each with a rated capacity of 3.8 litres per second at 15.2 metres TDH;

Chlorine Contact Chamber

- One (1) chlorine contact chamber having dimensions of 27.4 m long by 4.3 m wide by 2.7 m liquid depth and a volume of 318 m^3;

- One (1) 2.13 m rectangular recessed weir located at the outlet of the effluent storage tank, complete with ultrasonic level sensor;

Outfall

- One (1) 1,067 millimetre diameter gravity outfall sewer leading from the *Works* to Owen Sound Bay;

Sludge Management

- An above-ground vented, 18.8 metre diameter glass-lined biosolids storage tank with a dome roof and a capacity of 2,000 cubic metres, equipped with three (3) jet nozzles for sludge mixing;

- One (1) mesophilic anaerobic primary digestion tank with a diameter of 19.8 m and volume of 2,210 m^3, with a concrete roof and equipped with a gas recirculation system and associated appurtenances;

Miscellaneous

- Four (4) submersible sewage pumps (sump pumps), each with a rated capacity of 6.3 litres per second at 9.4 metres TDH; and

- Including all controls and associated appurtenances.

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

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

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

"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;

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

"BOD5" (also "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 diversion of sewage around one or more unit processes within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final effluent sampling location, and discharging to the environment through the Sewage Treatment Plant outfall;

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

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

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

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

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

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

a) danger to the health or safety of any person; or,
b) injury or damage to any property, or serious risk of injury or damage to any property;

"Event" means an action or occurrence, at a given location within the Sewage Treatment Plant that causes a Bypass or Overflow. An Event ends when there is no recurrence of a Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Two Events are separated by at least 12 hours during which there has been no recurrence of a Bypass or Overflow;

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

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

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

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

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

"Monthly Average Concentration" means the arithmetic mean of all 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";

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

"Owner" means The Corporation of the City of Owen Sound and its successors and assignees;

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

"Peak Daily Flow Rate" means the maximum rate of sewage flow during a one day period for which the plant or process unit was designed;

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

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

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

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

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

"Water Supervisor" means the Water Supervisor for the Owen Sound office of the Ministry; and

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

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

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

(1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.

(3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the documents listed in the Schedule submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

2. EXPIRY OF APPROVAL

The approval issued by this Approval will cease to apply to those parts of the Proposed Works

which have not been constructed within five (5) years of the date of this Approval.

3. CHANGE OF OWNER

(1) The Owner shall notify the Water Supervisor and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:

(a) change of Owner;
(b) change of address of the Owner;
(c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the 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. UPON THE SUBSTANTIAL COMPLETION OF THE WORKS

(1) Within one (1) year of the Substantial Completion of the Proposed Works, a set of as-built drawings showing the works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

5. BY-PASSES

(1) Any Bypass is prohibited, except:

(a) in an emergency situation when a structural, mechanical or electrical failure that causes a temporary reduction in the capacity of the Sewage Treatment Plant or in unexpected and/or unavoidable circumstance(s) that are likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset;

(b) where the Bypass is a direct and unavoidable result of a planned maintenance procedure or other circumstance(s), the Owner having notified the Water Supervisor at least fifteen (15) days prior to the occurrence of Bypass and the Water Supervisor has given written consent of the Bypass;

(2) For any Bypass Event, the Owner shall forthwith notify the Spills Action Centre (SAC),

and the local Medical Officer of Health. This notice shall include, at a minimum, the following information for each Event:

(a) the date(s), time(s) of the Bypass(es);

(b) the treatment process(es) Bypassed and the status of the disinfection;

(c) the reason(s) for the Bypass(es).

(3) After any Bypass Event, the Owner shall collect and record the following information:

(a) the duration of the Bypass Event;

(b) the measured or the estimated volume of Bypass(es) for each Event.

(4) For any Bypass Event, the owner shall collect sample(s) of the Final Effluent, representative of the Event, at the Final Effluent Compliance Sampling Point, and analyse for all effluent parameters outlined in Effluent Limits condition. These samples shall be in addition to the regular samples required in the Monitoring and Recording condition and shall follow the same Protocols specified in the Monitoring and Recording condition.

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

6. OVERFLOWS

(1) Any Overflow is prohibited, except:

(a) in an emergency situation when a structural, mechanical or electrical failure that causes a temporary reduction in the capacity of the Sewage Treatment Plant or in an unexpected and/or unavoidable circumstance(s) that are likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset;

(b) where the Overflow is a direct and unavoidable result of a planned maintenance procedure or other circumstance(s), the Owner having notified the Water Supervisor at least fifteen (15) days prior to the occurrence of the Overflow and the Water Supervisor has given written consent of the Overflow.

(2) For any Overflow Event, the Owner shall forthwith notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the

following information for each Event:

(a) the date(s), time(s) of the Overflow(s);
(b) the location(s) of the Overflow(s) and the receiver;
(c) the reason(s) for the Overflow(s); and
(d) the level of treatment the Overflow(s) has received and disinfection status of same.

(3) After any Overflow Event, the Owner shall collect and record the following information:

(a) the duration of the Overflow Event;
(b) the monitored or estimated volume of the Overflow(s); and
(c) the impact of Overflow(s) on the receiver.

(4) For any Overflow Event, the Owner shall collect samples, representative of the Event, consisting of a minimum of two (2) grab samples of the Overflow, one at the beginning of the Event and one approximately near the end of the Event, and every 4 hours for the duration of the Event, and have them analysed for effluent parameters outlined in Effluent Limits condition. For raw sewage and primary treatment system Overflow, BOD5 shall be monitored instead of CBOD5.

(5) The Owner shall submit a summary report of the Overflow(s) Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary report shall be in an electronic format, which shall contain, at a minimum; the types of information set out in Subsections (2), (3) and (4) for Overflow(s). The Water Supervisor may modify the reporting frequency at any time in writing.

7. EFFLUENT OBJECTIVES

(1) The Owner shall use best efforts to operate and maintain the Previous 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 (Previous Works)

Effluent Parameter	**Concentration Objective** (milligrams per litre unless otherwise indicated)
Column 1	Column 2
CBOD5	64.0
Total Suspended Solids	52.0
Total Phosphorus	0.8
E. Coli	200 organisms/100 millilitres

(2) The Owner shall use best efforts to:

(a) maintain the pH of the effluent from the Works within the range of 6.0 to 9.5, inclusive, at all times;
(b) operate the Works within the Rated Capacity of 24,545 cubic metres per day;
(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;
(d) operate and maintain the Works such that the effluent is continuously disinfected; and
(e) ensure that the effluent discharged from the Works contains a Total Residual Chlorine concentration of at least 0.1 milligrams per litre at all times.

(3) The Owner shall include in all reports submitted in accordance with Condition 11 a summary of the efforts made and results achieved under this Condition.

(4) The effluent objectives set out in subsection (1) and subsection (2) shall **cease to be in effect** three (3) months after the Substantial Completion of the Proposed Works.

(5) The Owner shall use best efforts to design, construct and operate the Proposed 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 2 - Effluent Objectives (Proposed Works)

Effluent Parameter	**Concentration Objective** (milligrams per litre unless otherwise indicated)
Column 1	Column 2
CBOD5	12.0
Total Suspended Solids	12.0
Total Ammonia-Nitrogen (Non-freezing period) (Freezing period)	 1.6 3.2
Total Phosphorus (Non-freezing period) (Freezing period)	 0.5 0.8
E-Coli (count/100 mL)	150

Note: Freezing period represents the **period between December 1 and April 30** when the daily average surface water temperature of the Owen Sound Bay is typically less than 5^0 C.
Non-freezing period represents the **period between May 1 and November 30** when the daily average surface water temperature of the Owen Sound Bay is typically greater than 5^0 C.

(6) The Owner shall use best efforts to:

(a) maintain the pH of the effluent from the Works within the range of 6.5 to 8.5, inclusive, at all times;
(b) operate the works within the Rated Capacity of the Works (24,545 m^3/day);
(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.

(7) The effluent objectives set out in subsection (5) and subsection (6) shall **be in effect** three (3) months after the Substantial Completion of the Proposed Works.

8. EFFLUENT LIMITS

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

Table 3 - Effluent Limits (Previous Works)

Effluent Parameter	**Average Concentration** (milligrams per litre unless otherwise indicated)
Column 1	Column 2
CBOD5	64.0
Total Suspended Solids	52.0
Total Phosphorus	1.0
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 Annual Average Concentration of the CBOD5 and Total Suspended Solids parameters named in Column 1 of subsection (1) shall not exceed the corresponding maximum concentration set out in Column 2 of subsection (1).

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

(c) The pH of the effluent shall be maintained within the limits outlined in subsection (1), at all times.

(3) The effluent limits set out in subsection (1) shall **cease to be in effect** three (3) months after the Substantial Completion of the Proposed Works.

(4) Only those monitoring results collected during the corresponding time period shall be used in calculating the Annual Average Concentration and Monthly Average Concentration for this Approval.

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

Table 4 - Effluent Limits (Proposed Works)

Effluent Parameter	**Monthly Average Concentration** (milligrams per litre unless otherwise indicated)	**Annual Average Waste Loading** (kilograms per day unless otherwise indicated)
Column 1	Column 2	Column 2
CBOD5	15.0	368
Total Suspended Solids	15.0	368
Total Ammonia-N (Non-freezing period) (Freezing period)	 3.0 5.0	 73.6 122.7
Total Phosphorus (Non-freezing period) (Freezing period)	 0.8 1.0	 19.6 24.5
E. Coli (count/100 mL) (monthly geometric mean density)	200	N/A
Total Residual Chlorine	0.02	0.49
pH of the effluent maintained between 6.0 to 9.5, inclusive, at all times		

Note: Freezing period represents the **period between December 1 and April 30** when the daily average surface water temperature of the Owen Sound Bay is typically less than 5^0 C.
Non-freezing period represents the **period between May 1 and November 30** when the daily average surface water temperature of the Owen Sound Bay is typically greater than 5^0 C.

(6) For the purposes of determining compliance with and enforcing subsection (5):

(a) The Monthly Average Concentration of a parameter named in Column 1 of subsection (5) shall not exceed the corresponding maximum concentration set out in Column 2 of subsection (5).

(b) The Annual Average Loading of a parameter named in Column 1 of subsection (5) shall not exceed the corresponding maximum concentration set out in Column 3 of subsection (5).

(c) The pH of the effluent shall be maintained within the limits outlined in subsection (1), at all times.

(7) Notwithstanding subsection (5), 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.

(8) The effluent limits set out in subsection (5) shall **be in effect** three (3) months after the Substantial Completion of the Proposed Works.

(9) Only those monitoring results collected during the corresponding time period shall be used in calculating the Monthly Average Concentration for this Approval.

9. OPERATION AND MAINTENANCE

(1) The Owner shall exercise due diligence in ensuring that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, including training in all procedures and other requirements of this Approval and 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 Water Supervisor; and

(f) procedures for receiving, responding and recording public complaints, including recording any follow up actions taken.

(3) The Owner shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.

(4) The Owner shall provide for the overall operation of the Works with an operator who holds a licence that is applicable to that type of facility and that is of the same class as or higher than the class of the facility in accordance with Ontario Regulation 129/04.

10. MONITORING AND RECORDING

The Owner shall carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) For the purposes of this condition, the following definitions apply:

(a) Daily means once each day;

(b) Weekly means once each week;

(c) Bi-weekly means once every two weeks;

(d) Monthly means once every month;

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

Table 5 - Influent Monitoring
Sampling Location: Inlet Works

Parameters	Sample Type	Frequency
BOD5	Composite	Weekly
Total Suspended Solids	Composite	Weekly
Total Phosphorus	Composite	Weekly
Total Ammonia Nitrogen	Composite	Weekly
pH	Grab	Weekly
Temperature	Grab	Weekly

Table 6 - Effluent Monitoring
Sampling Location: Effluent Outfall

Parameters	Sample Type	Frequency
CBOD5	Composite	Weekly
Total Suspended Solids	Composite	Weekly
Total Phosphorus	Composite	Weekly
Total Ammonia Nitrogen	Composite	Weekly
E. Coli	Grab	Weekly
pH	Grab	Weekly
Temperature	Grab	Weekly
Total Residual Chlorine	Grab	Daily

(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; and

(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. 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 measurement frequencies specified in subsection (2) in respect to any parameter are minimum requirements which may, after one (1) year of monitoring in accordance with this Condition, be modified by the Water Supervisor in writing from time to time.

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

(8) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

11. LIMITED OPERATIONAL FLEXIBILITY

(1) The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works ", included under Schedule B of this Approval, as amended.

(2) Sewage works proposed under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.

(3) The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.

(4) For greater certainty, the following are not permitted as part of Limited Operational Flexibility:

(a) Modifications to the Works that result in an increase of the Rated Capacity of the Works;

(b) Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;

(c) Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;

(d) Modifications to the Works approved under s.9 of the EPA, and

(e) Modifications to the Works pursuant to an order issued by the Ministry.

(5) Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.

(6) If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, as deemed necessary in consultation with the Water Supervisor, provide a revised copy of this plan for approval to the local fire services authority prior to implementing Limited Operational Flexibility.

(7) For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the *Environmental Protection Act, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, Lake Simcoe Protection Act* and *Greenbelt Act.*

(8) Prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the Water Supervisor.

12. REPORTING

(1) One week prior to the start up of the operation of the Proposed Works, the Owner shall notify the Water Supervisor (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 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.

(3) The Owner shall report to the Water Supervisor or designate, any exceedance of any parameter specified in Condition 7 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedance.

(4) 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.

(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 Water Supervisor a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the Substantial Completion 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;

(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) 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.

Schedule 'A'

I. ***PREVIOUS WORKS*** **APPROVED ON MAY 5, 2008 UNDER ECA No. 3256-766QEV:**

1. E-mails and attachments dated March 6, 2008 and April 11, 2008 from Mike Crone of The Corporation of the City of Owen Sound to Andre Schnell of the Ontario Ministry of the Environment;

2. The final plans and specifications prepared by Gore & Storrie Limited, Consulting Engineers, dated 1975, 1978 and 1979 and by Henderson, Paddon & Associates Limited, Consulting Engineers, dated 1996;

II. ***PREVIOUS WORKS*** **APPROVED ON NOVEMBER 28, 2008 UNDER ECA No. 8788-7L2KAW*:***

1. Application for Approval of Municipal and Private Sewage Works submitted by Chris Webb, P.Eng., Manager of Engineering Services of The Corporation of the City of Owen Sound dated September 8, 2008;

2. Owen Sound Wastewater Treatment Plant Influent Works Upgrades Design Brief and enclosed plans/design drawings), dated September 2008, prepared by Triton Engineering Services limited;

3. Owen Sound Wastewater Treatment Plant Influent Works Upgrades Schedule "B" Class Environmental Assessment Project File, dated September 2008, provided by Triton Engineering Services Limited;

4. A letter dated October 9, 2008 from Christine M. Furlong, P.Eng. of Triton Engineering Services Limited to Nancy He of the Ontario Ministry of the Environment;

5. Letter and attachment from Mike Crone, Manager of Public Works, Public Works Division, City of Owen Sound to Phil Bye of the Ministry of the Environment (MOE), dated July 25, 2008;

6. Document entitled "City of Owen Sound Waste Water Treatment Plant Impact Assessment Plan, As Required By the Ministry of Environment, As Amended July 31, 2008"; and

7. E-mail dated August 19, 2008 from Mike Crone, Manager of Public Works, City of Owen Sound to Andre Schnell of the MOE.

III. ***PROPOSED WORKS*** **:**

1. Application for Environmental Compliance Approval submitted by The Corporation of the City of Owen Sound dated February 10, 2014 and design specifications and drawings prepared by J. L. Richards & Associates Limited, Kingston, Ontario.

2. "City of Owen Sound Wastewater Treatment Plant Upgrade - Design Brief" dated March 2014 prepared by J. L. Richards & Associates Limited, Kingston, Ontario and Conestoga Rovers & Associates, Waterloo, Ontario.

3. Application for amendment of Environmental Compliance Approval submitted by The Corporation of the City of Owen Sound dated December 21, 2015 and design specifications and drawings prepared by J. L. Richards & Associates Limited, Kingston, Ontario.

Schedule B
Limited Operational Flexibility Criteria for Modifications to Municipal 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. Adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the facility Rated Capacity is not exceeded and the existing flow process and/or treatment train are maintained, as applicable.

   1.2 Sewage Treatment Process

   a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.

   b. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.

   c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.

   d. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the works that result in an increase of the Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.

   e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same. For clarity proposes, the following equipment can be considered under this provision: screens, grit separators, blowers,

aeration equipment, sludge thickeners, dewatering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

1.3 Sewage Treatment Plant Outfall

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

1.4 Sanitary Sewers

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

1.5 Pilot Systems

a. Installation of pilot systems for new or existing technologies provided that:

i. any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,
ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and Water Supervisor three months after completion of the pilot project.

2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.

3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.

4. The modifications noted in section (3) above are <u>not</u> required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.

Ontario
Ministry of
the Environment

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, 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. Conforms with the Limited Operational Flexibility as per 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.53 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. These 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)

Notice of Modifications Dec-2013.pdf

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.

2. Condition 2 is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of approval of the Works are still applicable at the time of construction, to ensure the ongoing protection of the environment.

3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.

4. Condition 4 is included to ensure that the Works are constructed in accordance with the approval and that record drawings of the Works "as constructed" are maintained for future references.

5. Condition 5 and 6 are included to indicate that By-pass / Overflows of untreated or partially treated sewage to the receiving watercourse is prohibited, save in certain limited circumstances where the failure to Bypass / Overflow could result in greater injury to the public interest than the Bypass itself where a Bypass / Overflow will not violate the approved effluent requirements, or where the Bypass / Overflow can be limited or otherwise mitigated by handling it in accordance with an approved contingency plan. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Bypass / Overflow events.

6. Condition 7 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs and before the compliance limits of Condition 6 are exceeded..

7. Condition 8 is imposed to ensure that the effluent discharged from the Works to the Owen Sound Bay meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality, fish and other aquatic life in the receiving water body.

8. Condition 9 is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry.

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

9. Condition 10 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and effluent limits specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.

10. Condition 11 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These Conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the Terms and Conditions of this Approval, MOE policies, guidelines, and industry engineering standards and best management practices.

11. Condition 12 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 9122-9HJJ92 issued on June 12, 2014

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 27th day of February, 2017

Fariha Pannu.

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

SH/
c: DWMD Supervisor, MOECC Owen Sound
Michael Troop, J.L. Richards & Associates Limited

Notice of Modifications Dec-2013.pdf