Pursuant to Environmental Protection Act, R.S.O. 1990, c.E.19 (EPA), and the regulations made thereunder and subject to the limitations thereof, this System Wide Environmental Compliance Approval (ECA) for Municipal Sewage Works is issued under Section 20.2 of Part II of the EPA to:

Site Location:

**The Regional Municipality of Halton**

1151 Bronte Road
Oakville, Ontario  L6M 3L1

For the following municipal sewage works:

**The Burlington Skyway Wastewater Treatment Plant**

This Environmental Compliance Approval includes the following:

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<tr>
<th>Schedule</th>
<th>Contents</th>
</tr>
</thead>
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<td>Schedule A</td>
<td>Description of Works</td>
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**Schedule A: Description of Works**

<table>
<thead>
<tr>
<th>System Owner</th>
<th>The Regional Municipality of Halton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Compliance Approval (ECA) Number</td>
<td>1545-9B7PT7, issued on November 22, 2013</td>
</tr>
<tr>
<td>System Name</td>
<td>Burlington Skyway Wastewater Treatment Plant</td>
</tr>
</tbody>
</table>

**Overview**

The Burlington Skyway Wastewater Treatment Plant (WWTP) consists of one wastewater treatment plant and a sanitary collection system, draining entirely to the Burlington Skyway WWTP. The entire system serves the urban area of the City of Burlington and a small portion of the Town of Oakville. The collection system is approved under ECA No. 2401-9BFRGH, dated November 22, 2013. The projected population of 185,000 reside across a drainage area of approximately 9,000 ha, with a mix of residential, commercial and institutional and industrial land uses for the planning horizon (2031).
The Approval covers the Skyway WWTP and the pumping stations and any stormwater management facility located within the WWTP footprint. The sewage collection system and its associated lift stations are covered under a separate approval. This Approval does not cover any storm sewers, stormwater management facilities or other stormwater infrastructure, or waste management systems, leachate collection or pumping facilities covered under other instruments.

This Schedule A includes:

1.0 System-Wide Approval – Burlington Skyway WWTP
2.0 System-Wide Approval – Burlington Skyway WWTP Proposed Works
3.0 Revocation and Replacement of Environmental Compliance Approvals

1.0 System Wide Approval - Burlington Skyway WWTP

The main components (Previous Works) of the Burlington Skyway WWTP System-Wide Approval include:

<table>
<thead>
<tr>
<th><strong>Burlington Skyway WWTP</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Street Address</strong></td>
<td>1125 Lakeshore Road, City of Burlington, ON L7S 1A8</td>
</tr>
<tr>
<td></td>
<td>Regional Municipality of Halton</td>
</tr>
<tr>
<td><strong>UTM Coordinates</strong></td>
<td>Northing: 597215.311 Easting: 479563.988</td>
</tr>
<tr>
<td><strong>System Approved Rated Capacity</strong></td>
<td>Burlington Skyway WWTP is approved for a <strong>Rated Capacity</strong> of 140,000 m$^3$/day (140 MLD), discharging to Burlington Bay, Lake Ontario.</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td>The Skyway WWTP is a tertiary level treatment system with a <strong>Rated Capacity</strong> of 140,000 m$^3$/day, and a design <strong>Peak Flow Rate</strong> of 500,000 m$^3$/day (500 MLD).</td>
</tr>
</tbody>
</table>

1.1 Raw Sewage Pumping Stations

| Sewage Pumping Station | - four (4) 1,576 L/s rated capacity dry pit submersible variable frequency drive (VFD) raw sewage pumps. |
| - four (4) 289 L/s rated capacity dry pit submersible raw sewage pumps. |

1.2 Inlet Works

| Screening | - three (3) 19 mm mechanically cleaned bar screens each having a hydraulic rated capacity of 250,000 m$^3$/day. |
| Grit Removal | - four (4) 320 m$^3$ aerated grit removal |
The split-flow channels are designed to operate at flows at or above 250000 m3/day.
## 1.5. Final Clarifiers

| Final Clarifiers | - sixteen (16) 1,239 m³ secondary clarifiers, each providing 335 m² of surface area and 3.7 m SWD, each equipped with baffles, inlet feed wells, and flocculating wells.  
- two (2) 3,085 m³ secondary clarifiers, each providing 671 m² of surface area and 4.6 m SWD, each equipped with sludge and scum collectors.  
- four (4) 216 L/s rated capacity return activated sludge VFD pumps.  
- eight (8) 162 L/s rated capacity return activated sludge VFD pumps.  
- one (1) 12 L/s rated capacity scum pump.  
- two (2) 25 L/s rated capacity waste activated sludge (WAS) VFD pumps (one duty, one standby). Two (2) 1,037 m³/day rated WAS pumps. |
|---|---|---|---|

## 1.6 Tertiary Treatment

| Tertiary Lift Pump Station and Treatment Facility | - four (4) 1,127 L/s rated capacity VFD lift pumps (three duty and one standby) operating from two (2) 195,000 m³ capacity wet wells, pumping secondary effluent to flow by gravity through tertiary treatment unit operations, UV disinfection, and the outfall.  
A tertiary filtration system with a design capacity of 146,000 m³/day (with a Peak Flow Rate of 292,000 m³/d) consisting of |
<table>
<thead>
<tr>
<th>1.7 Disinfection Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disinfection Facility</td>
</tr>
<tr>
<td>- two (2) UV channels, each channel equipped with two (2) UV lamp banks, each UV lamp bank equipped with one hundred forty four (144) high intensity low pressure UV lamps, designed to provide approximately 30 mJ/cm² UV dosage operating at 70% UV transmittance at 253.7 nm for a Peak Flow Rate of 292,000 m³/day and peak hydraulic flow rate of 330,000 m³/day.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.8 Outfall Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outfall Facility</td>
</tr>
<tr>
<td>- one (1) 1,800 mm diameter subaqueous concrete pipe outfall sewer extending from the outlet chamber located approximately 55 m southwest of the Burlington Skyway (NAD</td>
</tr>
</tbody>
</table>
83: UTM Zone 17: 596,750 m E, and 4,795,640 m N) and terminating at a bulkhead with six (6) 900 mm diameter diffusers located in a crib in Burlington Bay.
- one (1) 1,200 mm diameter subaqueous concrete pipe outfall sewer extending from the outlet chamber located approximately 55 m south-west of the Burlington Skyway Bridge (NAD 83: UTM Zone 17: 596,790 m E, and 4,795,577 m N) and terminating at a bulkhead with one (1) 1,200 mm diameter diffuser with deflector plate located in a crib in Burlington Bay.

1.9 Sludge Handling Facilities

| Waste Activated Sludge Thickening | - two (2) Rotary Drum Thickeners (RDT) waste activated sludge (WAS) thickeners (one duty and one standby), each with a hydraulic loading capacity of 90 m³/hr and solids loading capacity of 637 kg/hr, designed to achieve from 4 to 8% solids of WAS.
- two (2) 1.81 L/s @ 21 m TDH capacity service water booster pumps (one duty, one standby) to supply flushing water to the RDT. |
| Biosolids Management System | - two (2) primary anaerobic digesters each with a volume of 8 150 m³, each equipped with one (1) 50 L/s capacity digested sludge recirculation pump and one (1) sludge heat exchanger.
- one (1) secondary anaerobic digester with a volume of 7 610 m³ equipped with one (1) 50 L/s capacity digested sludge recirculation pump.
- one (1) 470 L/sec capacity pump equipped with four (4) singles and four (4) doubles floor mounted mixing nozzles providing hydraulic mixing of the secondary digester. |
| Sludge Dewatering System | - two (2) sludge dewatering belt filter presses each with a throughput of 10 dry tonnes/d equipped with two (2) sludge cake pumps each rated at 115 m³/day at 800 kPa.
- one (1) 28 L/s maximum capacity |
<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
</tr>
</thead>
</table>
| Centrate Management System                  | - two (2) rectangular Sequencing Batch Reactors (SBR) with a total capacity of 1,570 m³/day, each with a total storage volume of 980 m³ and a depth of 3.70 m, equipped with fine bubble aeration system, one (1) submersible dissolve oxygen (DO) sensor and one (1) submersible mixer, designed to provide conditioning for process recycle streams;  
   - two (2) 62 L/sec capacity variable speed treated centrate pumps (one duty and one standby) recycling treated centrate to the aeration tanks or headworks.  
   - two (2) process air blowers, each with design capacity of 5,780 sm³/hr and a discharge pressure of 50 kPa.                                                                                                                                                                                                 |
| Digester Gas Handling System                | - three (3) 1,565 m³/hr @ 49 kPa capacity gas compressors for the primary digester gas mixing system.  
   - three (3) 255 m³/hr @ 215 kPa capacity digester gas boosters for storage of excess digester gas in the gas sphere.                                                                                                                                                                                                                     |
| Biosolids Process & Truck Loading Emission Control | - one (1) 861 L/s capacity biofilter, equipped with two (2) variable speed fans (one duty, one standby), connected to existing Odour Emission Control Stack No. 2, and servicing waste activated sludge thickening, biosolids dewatering, and cake storage hoppers.  
   - one (1) 5,670 L/s capacity activated carbon scrubber, equipped with two (2) variable speed fans (one duty, one standby), connected to existing Odour Emission Control Stack No. 1, and servicing intermittent air from the biosolids truck loading bay.                                                                                           |
### 1.10 Chemical Addition - Coagulation

<table>
<thead>
<tr>
<th>Description</th>
<th>Metal Salt addition for coagulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Point #1</td>
<td>Preliminary effluent channel</td>
</tr>
<tr>
<td>Feed Point #2</td>
<td>Aeration effluent channel</td>
</tr>
<tr>
<td>Feed Point #3</td>
<td>Tertiary influent conduit</td>
</tr>
</tbody>
</table>
| Equipment                    | - Two (2) 65 m³ capacity storage tanks, two (2) 72 m³ capacity storage tanks, one (1) 7.6 m³ capacity storage tank  
                                | - Seven (7) 90 L/hr and five (5) 120 L/hr chemical feed pumps, two (2) 2,300 L/hr transfer pumps |
| Notes                        | Coagulation can be used for enhanced phosphorus removal, settling and filter aid |

### 1.11 Chemical Addition - Flocculation

<table>
<thead>
<tr>
<th>Description</th>
<th>Polymer addition for flocculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Point #1</td>
<td>Preliminary effluent channel</td>
</tr>
<tr>
<td>Feed Point #2</td>
<td>Aeration effluent channel</td>
</tr>
</tbody>
</table>
| Equipment                    | - One (1) 5.0 m³ capacity bulk storage tank, one (1) 3.0 m³ capacity mixing tank,  
                                | - Five (5) 12.5 L/min and one (1) 40 L/min chemical feed pumps |
| Notes                        | Flocculation can be used for enhanced primary and secondary treatment (CEPT / CEST) |

### 1.12 Chemical Addition - Disinfection

<table>
<thead>
<tr>
<th>Description</th>
<th>Hypochlorite addition for disinfection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Point #1</td>
<td>Raw sewage overflow</td>
</tr>
<tr>
<td>Feed Point #2</td>
<td>Primary overflow</td>
</tr>
<tr>
<td>Feed Point #3</td>
<td>Secondary overflow</td>
</tr>
<tr>
<td>Feed Point #4</td>
<td>Plant service water</td>
</tr>
<tr>
<td>Feed Point #5</td>
<td>Tertiary filters</td>
</tr>
</tbody>
</table>
| Equipment                    | - Two (2) 35 m³ capacity storage tanks, one (1) 1.5 m³ capacity storage tank  
                                | - Two (2) 4.5 L/min, one (1) 18 L/hr chemical feed pumps, and four (4) 6.6 L/min chemical feed pumps |
| Notes                        | Hypochlorite can be used for plant service water and overflow disinfection, and for periodic cleaning and maintenance of filter media |

### 1.13 Chemical Addition - Sludge Conditioning

<table>
<thead>
<tr>
<th>Description</th>
<th>Polymer addition for sludge conditioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Point #1</td>
<td>Thickening influent</td>
</tr>
<tr>
<td>Feed Point #2</td>
<td>Dewatering influent</td>
</tr>
<tr>
<td>Equipment</td>
<td>- One (1) 1.2 m³ capacity neat polymer tote, two (2) 9.0 kg/hr maximum capacity make-down systems (one duty, one standby), one (1) 4.0 m³ capacity emulsion solution storage tanks, two (2) 22.5 m³ capacity bulk emulsion polymer storage tanks, one (1) 22.5 m³ capacity day tank - Three (3) 35 L/min and two (2) 168 L/min chemical feed pumps, two (2) 11.4 m³/hr recirculation pumps, two (2) 30 kg/hr make-up units.</td>
</tr>
<tr>
<td>Notes</td>
<td>Polymer can be used for conditioning of thickener and dewatering feed sludge</td>
</tr>
</tbody>
</table>

1.14 Stormwater Management (SWM)

| Stormwater management facility | - a SWM facility to service a total drainage area of 10 ha within the Burlington Skyway WWTP footprint, designed to provide quantity and quality treatment for stormwater runoff from the approximately 1.0 ha of impervious drainage area added due to the expansion of the sewage treatment plant, by attenuating stormwater runoff flow levels to or below the pre-expansion levels during storm events up to and including 1:100 year return frequency |
| Outfall No. 1 | - one (1) dry stormwater pond with a storage capacity of 275 m³ and ten (10) grassed swales (Swales No. C3, C4, C5, C26, C27, C63, C29, C32 and C31) with a total length of approximately 335 m, with top width ranging from 3 m to 6 m, depth ranging from 0.18 m to 0.70 m, and sloped ranging from 0.2% to 0.68%, providing a total storage capacity of 300 m³, equipped with a total of seven (7) culverts with diameters ranging from 300 mm to 450 mm, discharging through the MTO ditch running along the east side of the Queen Elizabeth Way to Hamilton Harbour. |
| Outfall No. 2 | - one (1) dry stormwater pond with a storage capacity of 350 m³ and fifteen |
### Outfall No. 3
- Four (4) grassed swales (Swale No. C34, C35, C67, and C68) with a total length of approximately 140 m, with top width ranging from 4 m to 7 m, depth ranging from 0.23 m to 0.58 m, and slopes ranging from 0.15% to 0.42%, providing a total storage capacity of 160 m³, equipped with two (2) culverts each with a diameter of 375 mm, discharging through the ditch running along the west side of the Lakeshore Road to Lake Ontario.

### Outfall No. 4
- Uncontrolled stormwater runoff discharging through the ditch running along the west side of the Lakeshore Road to Lake Ontario.

### 1.15 Miscellaneous

<table>
<thead>
<tr>
<th>Standby Power</th>
<th>- One (1) 3000 kW standby generator.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous</td>
<td>- All other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works.</td>
</tr>
<tr>
<td></td>
<td>- Integrated facility combining plant operations support services, Regional water and wastewater laboratory facilities, and public education areas.</td>
</tr>
<tr>
<td></td>
<td>- Control room with remote process automation and monitoring controls.</td>
</tr>
<tr>
<td>Service Water Supply</td>
<td>- Three (3) 44.5 L/s @ 520 kPa rated capacity variable speed effluent</td>
</tr>
</tbody>
</table>
service water pumps (two duty and one standby), equipped with two (2) 0.8 mm screen opening self-cleaning strainers.
- two (2) 12.5 L/s @ 290 kPa rated capacity variable speed HVAC effluent water pumps (one duty, one standby), equipped with one (1) 0.8 mm screen opening self-cleaning strainer.

| Hauled Sewage Receiving | - hauled sewage is received up-stream of the Inlet Works. |

2.0 System Wide Approval – Burlington Skyway WWTP Proposed Works

The Burlington Skyway System-Wide ECA is approved for Proposed Works, subject to final design report, consisting of the following components:

### 2.1 Process Unit

| Off-line Peak Storage Tank | - a sewage storage tank, with total liquid storage volume of 16,000 m³.  
- two (2) 370 L/s unwatering pumps (one duty, one standby). |
| Fifth Primary Clarifier | - one primary clarifier 51.8 m x 15.3 m x 3.84 m SWD.  
- one (1) 18 L/s rated capacity raw sludge pump. |
| Waste Activated Sludge Thickening | - one (1) rotary drum thickener, 90 m³/h capacity, complete with polymer mixing valve, flocculation reaction and associated valves. |
| Sludge Dewatering System | - two (2) centrifuges, minimum 2,000 kg/h capacity, to replace existing two (2) belt filter press. |
| Aeration | - Eight (8) anoxic selectors, 320 m³ each, to be installed at the front zone of each existing aeration tanks 1 to 8. |

### 2.2 Miscellaneous

| Hauled Sewage Receiving Station | - hauled sewage receiving station package to be installed directly outside of the Headworks Building at the northwest corner at the location of the existing hauled sewage connection point. |
| Emergency Tertiary Overflow Chamber | - conversion of old UV tank to emergency tertiary overflow chamber |
3.0 Revocation and Replacement of Environmental Compliance Approvals

3.1 The issuance of this Approval revokes and replaces approvals or portions thereof issued by the Ministry for:

(1) Approval # 1565-8P4M3X issued on February 8, 2012.

(2) Approval # 3-0514-74-001 issued on July 11, 1974.

(3) Approval # 2-0000-68-000031 issued on April 5, 1968.


Schedule B: Terms and Conditions

<table>
<thead>
<tr>
<th>System Owner</th>
<th>The Regional Municipality of Halton</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECA Number</td>
<td>8265-8LBPR2</td>
</tr>
<tr>
<td>System Name</td>
<td>Burlington Skyway Wastewater Treatment Plant</td>
</tr>
</tbody>
</table>

This Schedule B includes:

1.0 Definitions
2.0 Terms and Conditions
3.0 Reasons

1.0 Definitions

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;

"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;

"Bypass" 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;

"CWA" means the Clean Water Act, R.S.O. 2006, c.22, as amended;

"Composite Sample" means a sample made up of at least 24 individual samples taken approximately one hour apart, collected over a time period of 24 consecutive hours;

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

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

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

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

"Emergency Situation" includes 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

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

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

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

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

"Grab Sample" means an individual sample of at least 1000 millilitres collected in the appropriate container at a randomly selected time over a period of time not exceeding 15 minutes;

"Limited Operational Flexibility" means the 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, CWA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Modifications" means any addition, replacement, alteration, expansion or optimization for the Works as specified under Limited Operational Flexibility;

"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 to Sewage Works" means the entire form entitled 'Form 1 - Notice of Modification to Sewage Works', attached to this Approval, or as amended in the Ministry's website;

"Owner" means Regional Municipality of Halton and its successors and assignees;

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

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

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

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

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

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

"Regional Water Compliance Manager" means the Regional Water Compliance Manager of the West-Central Region of the Ministry;

"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 Toronto, York-Durham and Halton-Peel Offices of the Ministry; and

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

2.0 Terms and Conditions

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

2.1 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, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this Approval.

(3) Where there is a conflict between a provision of any submitted document 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 listed submitted documents, the document bearing the most recent date shall prevail.

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

(5) The requirements of this Approval are severable. If any requirement of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such requirement 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.

2.2 CHANGE OF OWNER

(1) The Owner shall notify the Water Supervisor 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 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.

2.3 UPON THE SUBSTANTIAL COMPLETION OF THE WORKS

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

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

2.4 BYPASSES/OVERFLOW

(1) Any Bypass or Plant Overflow is prohibited, except:

(a) in an Emergency Situation;

(b) where the approved design and operation of the Works provides for Bypasses to be triggered under certain flow conditions and those conditions have been met and the Peak Flow Rate of 500 MLD is not exceeded (Split Flow at flows greater than 250 MLD and Tertiary Bypass at flows greater than 280 MLD);

(c) where the Bypass / Plant Overflow is a direct and unavoidable result of a planned maintenance procedure, the owner notified the Water Supervisor 15 days prior to the Bypass and the Regional Water Compliance Manager has given written consent of the Bypass; and

(d) where the Bypass / Plant Overflow is planned for research or training purposes, the discharger notified the Water Supervisor 15 days prior to the Bypass / Plant Overflow and the Regional Water Compliance Manager has given written consent of the Bypass / Plant Overflow.

(2) The Owner shall forthwith notify the Spills Action Centre (SAC) and the Medical Officer of Health of all Bypass and Plant Overflow Events except the events occurring under subsection (1)(b). This notice shall include, at a minimum, the following information:

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

(b) the location of the Event;

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

(d) the reason for the Event; and

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

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

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

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

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

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

(e) the reason for the Event(s); and
(f) the level of treatment the Bypass(es) and/or Plant Overflow(s) received and disinfection status of same.

(4) The Owner shall use best efforts to collect at least one (1) grab sample of the overflow and have it analyzed for parameters outlined in Condition 2.6 using the protocols specified in Condition 2.8.

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

2.5 EFFLUENT OBJECTIVES

(1) The Owner shall use best efforts to design, construct and operate 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>
<thead>
<tr>
<th>Effluent Parameter</th>
<th>Average Concentration Objective (milligrams per litre unless otherwise indicated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD5</td>
<td>8.0</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>5.0</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>0.30</td>
</tr>
<tr>
<td>Total Ammonia Nitrogen</td>
<td>2.3</td>
</tr>
<tr>
<td>(May 1 to Nov 30)</td>
<td>4.5</td>
</tr>
<tr>
<td>(Dec 1 to Apr 30)</td>
<td></td>
</tr>
<tr>
<td>E. Coli (Apr 1 to Oct 31)</td>
<td>150 organisms / 100 mL Monthly Geometric Mean Density</td>
</tr>
</tbody>
</table>

(2) The effluent objectives set out in subsection (1) shall cease to be in effect six (6) months after the Substantial Completion of the Proposed Works.

(3) 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>
<thead>
<tr>
<th>Effluent Parameter</th>
<th>Average Concentration Objective (milligrams per litre unless otherwise indicated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD5</td>
<td>8.0</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>5.0</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>0.12</td>
</tr>
<tr>
<td>Total Ammonia Nitrogen</td>
<td>1.6</td>
</tr>
<tr>
<td>(May 1 to Sep 30)</td>
<td>3.2</td>
</tr>
<tr>
<td>(Oct 1 to Apr 30)</td>
<td></td>
</tr>
<tr>
<td>E. Coli (Apr 1 to Oct 31)</td>
<td>150 organisms / 100 mL Monthly Geometric Mean Density</td>
</tr>
<tr>
<td>pH</td>
<td>6.5 - 9.0</td>
</tr>
</tbody>
</table>
(4) The effluent objectives set out in subsection (3) **shall be in effect** six (6) months after the **Substantial Completion** of the **Proposed Works**.

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

   (a) maintain the pH of the effluent from the **Works** within the range of 6.5 - 9.0, inclusive, at all times;

   (b) operate 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 discoloration on the receiving waters.

(6) The **Owner** shall include in all reports submitted in accordance with Condition 2.9 a summary of the efforts made and results achieved under this Condition.

(7) Stipulations made in Condition 2.6(2)(a) and 2.6(2)(b) and Condition 2.6(5)(a) and 2.6(5)(b) for the effluent limits apply for the effluent objective.

### 2.6 EFFlUENT LIMITS

(1) The **Owner** shall operate and maintain the **Previous 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>
<thead>
<tr>
<th>Effluent Parameter</th>
<th>Average Concentration (milligrams per litre unless otherwise indicated)</th>
<th>Average Waste Loading (kilograms per day unless otherwise indicated)@118,000 m3/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 1</td>
<td>Column 2</td>
<td>Column 3</td>
</tr>
<tr>
<td>CBOD5</td>
<td>10.0</td>
<td>1180.0</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>10.0</td>
<td>1180.0</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>0.5</td>
<td>47.2</td>
</tr>
<tr>
<td>Total Ammonia Nitrogen (May 1 to Nov 30)</td>
<td>2.8</td>
<td>330.4</td>
</tr>
<tr>
<td>(Dec 1 to Apr 30)</td>
<td>5.6</td>
<td>660.8</td>
</tr>
<tr>
<td>E. Coli (Apr 1 to Oct 31)</td>
<td>200 organisms / 100 mL <strong>Monthly Geometric Mean Density</strong></td>
<td>-</td>
</tr>
<tr>
<td>pH of the effluent maintained between 6.0 to 9.5, inclusive, at all times</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

   (a) The **Annual Average Concentration** of **CBOD5** and Total Suspended Solids shall not exceed the corresponding maximum concentration set out in Column 2 of Table 3.

   (b) The **Monthly Average Concentration** of Total Ammonia Nitrogen and Total Phosphorus shall not exceed the corresponding maximum concentration set out in Column 2 of Table 3.
(c) The *Annual Average Loading* of CBOD5, Total Suspended Solids and Total Phosphorus shall not exceed the corresponding maximum waste loading set out in Column 3 of Table 3.

(d) The *Monthly Average Loading* of Total Ammonia Nitrogen shall not exceed the corresponding maximum waste loading set out in Column 3 of Table 3.

(e) The pH of the effluent shall be maintained within the limits outlined in Table 3, at all times.

(3) The effluent limits set out in subsection (1) shall **cease to be in effect** six (6) months after the Substantial Completion of the Proposed Works.

(4) The Owner shall operate and maintain the Proposed 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>
<thead>
<tr>
<th>Effluent Parameter</th>
<th>Average Concentration (milligrams per litre unless otherwise indicated)</th>
<th>Average Waste Loading (kg / day unless otherwise indicated) @140,000 m3/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD5</td>
<td>10.0</td>
<td>1400.0</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>10.0</td>
<td>1400.0</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>0.2</td>
<td>17.2</td>
</tr>
<tr>
<td>Total Ammonia Nitrogen (May 1 to Sep 30)</td>
<td>2.0</td>
<td>280.0</td>
</tr>
<tr>
<td>Total Ammonia Nitrogen (Oct 1 to Apr 30)</td>
<td>4.0</td>
<td>560.0</td>
</tr>
<tr>
<td>E. Coli (Apr 1 to Oct 31)</td>
<td>200 organisms / 100 mL Monthly Geometric Mean Density</td>
<td>-</td>
</tr>
</tbody>
</table>

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

(a) The *Annual Average Concentration* of CBOD5 and Total Suspended Solids shall not exceed the corresponding maximum concentration set out in Column 2 of Table 4.

(b) The *Monthly Average Concentration* of Total Ammonia Nitrogen and Total Phosphorus shall not exceed the corresponding maximum concentration set out in Column 2 of Table 4.

(c) The *Annual Average Loading* of CBOD5, Total Suspended Solids and Total Phosphorus shall not exceed the corresponding maximum waste loading set out in Column 3 of Table 4.

(d) The *Monthly Average Loading* of Total Ammonia Nitrogen shall not exceed the corresponding maximum waste loading set out in Column 3 of Table 4.

(e) The pH of the effluent shall be maintained within the limits outlined in Table 4, at all times.

(6) The effluent limits set out in subsection (4) **shall be in effect** six (6) months after the Substantial
Completion of the Proposed Works.

2.7 OPERATION AND MAINTENANCE

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

(2) The Owner shall maintain an operations manual 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.

2.8 MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the Works, carry out the following monitoring program:

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

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

(a) Weekly means once each week.

(b) 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 analyzed for each parameter listed and all results recorded:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Sample Type</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD5</td>
<td>Composite</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>Composite</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>Composite</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>Composite</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

**Note:** A Influent sampling point shall be determined in agreement with the *Water Supervisor*, in such a way as to reflect actual operating conditions.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Sample Type</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD5</td>
<td>Composite</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>Composite</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>Composite</td>
<td>Weekly</td>
</tr>
<tr>
<td>Total Ammonia Nitrogen</td>
<td>Composite</td>
<td>Weekly</td>
</tr>
<tr>
<td><em>E. Coli</em> (Apr 1 to Oct 31)</td>
<td>Grab</td>
<td>Weekly</td>
</tr>
<tr>
<td>pH</td>
<td>Grab</td>
<td>Weekly</td>
</tr>
<tr>
<td>Temperature</td>
<td>Grab</td>
<td>Weekly</td>
</tr>
<tr>
<td>Unionized Ammonia</td>
<td>Calculated</td>
<td>Weekly</td>
</tr>
</tbody>
</table>

**Note:** A Effluent sampling point shall be determined in agreement with the *Water Supervisor*, in such a way as to reflect actual operating conditions and to permit evaluation of the treatment works’ performance and compliance with effluent requirement.

(4) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

(a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;
(b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
(c) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.

(5) The temperature and pH of the effluent from the *Works* shall be determined in the field at the time of sampling for Total Ammonia Nitrogen. 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 6 months 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 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.

2.9 REPORTING

(1) Fifteen (15) days prior to the date of a planned Overflow being conducted pursuant to Condition 2.4, 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 Overflow.

(2) The Owner shall report to the Water Supervisor, any exceedence of any parameter specified in Condition 2.6 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedence.

(3) In addition to the obligations under Part X of the Environmental Protection Act, the Owner shall, within 10 working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the Water Supervisor describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

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

(5) The Owner shall prepare, and submit to the Water Supervisor, a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

(a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 2.6, 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 2.5.;

(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 Bypass, spill or abnormal discharge events; and

(j) any other information the Water Supervisor requires from time to time.

(6) The performance report, notifications and any other data and reports required under subsections (1), (2), (3) and (5) shall be provided in a format (paper-based and/or electronic) as approved by the Water Supervisor.

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

(8) The Owner shall, within 30-days of issuance of this Approval, submit a Wastewater System Profile Information document in a format as approved by the Water Supervisor, and shall resubmit the updated document every time a notification is provided to the Water Supervisor in compliance to Condition 2.2 of Schedule B.

2.10 SOURCE WATER PROTECTION

(1) The Owner shall ensure for the Works located on Wellhead Protection Areas (WHPAs), Intake Protection Zones (IPZ), Highly Vulnerable Aquifers (HVA) and Significant Groundwater Recharge Areas (SGRAs), where this activity has been identified as a Significant Drinking Water Threat, there is an operation and maintenance program in place that includes, but not limited to, the following requirements:

(a) Regular maintenance and inspection.

(b) Best management practices to be applied.

(2) To comply with Condition 2.10 (1), the Owner shall, within one (1) year after the Ministry’s approval of the Source Water Protection Plan, in adherence with the CWA regulations, submit a Source Water Protection Report to the Water Supervisor describing the following:

(a) Summary of the requirements in the Source Water Protection Plan;

(b) Plan showing the Works located on WHPAs, IPZ, HVA and SGRAs;

(c) Operation and maintenance program specifying measures and best management practices to be implemented to ensure the policies mandated under the Source Water Protection Plan are complied with; and

(d) Implementation Program to implement all measures and best management practices within a two (2) year period as applicable;


(4) The Owner shall submit the Source Water Protection Report, referenced in subsection (2) signed and stamped by a Professional Engineer or a Professional Geoscientist licensed in the Province of Ontario.

2.11 APPROVAL SUBJECT TO FINAL DRAWINGS
(1) The Owner shall not construct any portion of the Works under Section 2.0 of Schedule A, (Proposed Works) until detailed design drawings, specifications and an engineer's report containing detailed design calculations for these works have been submitted to and approved by the Director.

2.12 UPON THE SUBSTANTIAL COMPLETION OF THE WORKS

(1) Within one year of the Substantial Completion of the works under Section 2.0 of Schedule A (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.

3.0 Reasons

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

3.1 Condition 2.1 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.

3.2 Condition 2.2 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.

3.3 Condition 2.3 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.

3.4 Condition 2.4 is included to indicate that bypasses of untreated sewage to the receiving watercourse is prohibited, save in certain limited circumstances where the failure to Bypass could result in greater injury to the public interest than the Bypass itself where a Bypass will not violate the approved effluent requirements, or where the Bypass 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 events.

3.5 Condition 2.5 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs as well as before the compliance limits of Condition 6 are exceeded.

3.6 Condition 2.6 is imposed to ensure that the effluent discharged from the Works to the Burlington 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.

3.7 Condition 2.7 is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such a manual is an integral part of
the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner’s operation of the work.

3.8 Condition 2.8 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and effluent limits specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.

3.9 Condition 2.9 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

3.10 Condition 2.10 is included to ensure that the works covered by this Approval will conform to the significant threat policies and designated policies in the Source Water Protection Plan.

3.11 Condition 3.11 is included due to the provisional nature of the supporting documentation submitted by the Owner with the application for approval. The Director has only approved the Works in principle, and this condition will ensure that, in accordance with the provisions of the Ontario Water Resources Act, prior to the commencement of construction of any part of the Works, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, in order to determine the Works under Section 2.0 of Schedule A (Proposed Works) are capable to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval.

3.12 Condition 3.12 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.

Schedule C: Limited Operational Flexibility

<table>
<thead>
<tr>
<th>System Owner</th>
<th>The Regional Municipality of Halton</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECA Number</td>
<td>8265-8LBRPR2</td>
</tr>
<tr>
<td>System Name</td>
<td>Burlington Skyway Wastewater Treatment Plant</td>
</tr>
</tbody>
</table>

This Schedule C includes:

1.0 Terms and Conditions for Sewage Works
2.0 Criteria for Modifications to Sewage Works

1.0 Terms for Modifications to Sewage Works

1.1. The Owner may make Modifications to the Works in accordance with the terms and conditions of this Approval and subject to the Ministry’s “Criteria for Modifications to Sewage Works”, included under Section 2 of Schedule C, as amended from time to time.

1.2. Sewage works under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry publications “Design Guidelines for Sewage Works 2008”, and "Pipe Data Form" as amended.

1.3 The Owner shall ensure that, at all times, the Works and related equipment and appurtenances
which are installed or used to achieve compliance are operated in accordance with all terms and conditions of this Approval.

1.4 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 adversely affect the approved effluent quality of the Works or the location of the discharge;

(c) Modifications to the Works approved under s.9 of the EPA (i.e. works having an existing Air/Noise approval), and

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

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

1.6 If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall provide a revised copy of this plan to the local fire services authority prior to implementing Limited Operational Flexibility.

1.7 For greater certainty, any alteration 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.

1.8 Prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications (Form 1) describing any proposed Modifications to the Works and submit it to the Water Supervisor.

1.9 The Notice of Modifications (Form 1) and any other information associated with it shall be provided in a format (paper-based and/or electronic) as approved by the Water Supervisor.

2.0 Criteria for Modifications to Sewage Works

Modifications to the sewage works approved under this Approval that are permitted under the Limited Operational Flexibility, are outlined below. For clarity proposes, Modifications are not permitted for process equipment where treatment unit operations occur, including but not limited to: screens, grit separators, blowers, oxygen diffusers, sludge thickeners and dewatering equipment, UV systems, chlorine contact tanks, bio-disks, digester gas handling systems, and process reactors.

Modifications of the 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. If there is a conflict between the criteria listed below and the conditions in the Approval Section 1, of Schedule C, then the conditions in the Approval Section 1, of Schedule C shall take precedence.

Modifications to the Works permitted under Limited Operational Flexibility, and as per the conditions in the Approval are limited as follows:

2.1 Sewage Pumping Stations.
(a) Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment plant site, where the facility rated capacity is not exceeded and while maintaining the existing flow process and/or treatment train. (b) Replacing existing minor equipment with *Equivalent equipment* of different make and model, provided that there are no treatment process changes as a result of the replacement.

2.2 Inlet Works.

(a) Replacing existing minor equipment with *Equivalent equipment* of different make and model.

2.3 Sewage Treatment Process.

(a) Install or replace instrumentation or chemical dosage equipment for operational or maintenance purposes including replacing 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 Works’ effluent quantity and quality. (b) Expansion of buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses where the buffer zone is entirely on the proponent’s land.

(c) Optimize 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) Replacing existing minor equipment with *Equivalent equipment* of different make and model, provided that there are no treatment process changes as a result of the replacement.

2.4 Sewage Treatment Outfall.

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

2.5 Sanitary Sewers.

(a) Pipe relining and replacement with similar pipe size and slope to the site’s existing sanitary sewers and forcemains sewage collection system. The sewer main addition, modification, replacement and extensions do not include *combined sewers*.

(b) Sanitary gravity sewers and forcemains, except those with a nominal diameter greater than 1,200 mm.
2.6 Stormwater Management System.

(a) Modifications of stormwater management works to service the existing approved drainage area located within the Sewage Treatment Plant footprint, provided that there is no increase in the average impervious area established in the original design and the discharges from the site will not exceed the attenuated flows established in the original design.

(b) Installation of new oil grit separators.

2.6 Pilot Systems.

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

(a) any effluent from the pilot system is discharged to the inlet of the main sewage treatment plant or hauled off-site for proper disposal.

(b) any effluent from the pilot system discharged to the inlet of the main sewage treatment plant 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

(c) the pilot system’s duration be of up to 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.

Schedule D: Supporting Documents

<table>
<thead>
<tr>
<th>System Owner</th>
<th>The Regional Municipality of Halton</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECA Number</td>
<td>8265-8LBPR2</td>
</tr>
<tr>
<td>System Name</td>
<td>Burlington Skyway Wastewater Treatment Plant</td>
</tr>
</tbody>
</table>

This Schedule D includes:

1.0 Supporting Documents
2.0 Director's Approval

1.0 Supporting Documents

1.1 Application for Approval of Sewage Works by the Regional Municipality of Halton dated July 13, 2005, and design prepared by MacViro Consultants Inc. 1.2 Application for Approval of Sewage Works by the Regional Municipality of Halton dated July 26, 2007 for proposed change in monitoring parameter. 1.3 Application for Approval of Sewage Works by the Regional Municipality of Halton dated March 13, 2009, drawings and specifications prepared by AECOM Canada Ltd. 1.4 Application for Approval by the Regional Municipality of Halton dated May 16, 2011, and drawings and design specifications prepared by CH2M HILL Canada Limited. 1.5 Application for Approval of Sewage Works by the Regional Municipality of Halton dated August 29, 2011, and drawings and design specifications prepared by CH2M Hill Canada Limited, and supporting documents. 1.6 "Design Brief Burlington Skyway Wastewater Treatment Plant, Phase II Expansion, Contract 2" prepared by CH2M Hill Canada Limited, dated August 2011; and

1.10 Application for Limited Operational Flexibility at the Burlington Skyway WWTP, Engineer’s Report, dated October 2013, prepared by CH2M Hill Canada Limited.

2.0 Director’s Approval

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
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 22nd day of November, 2013

Edgardo Tovilla
Director
appointed for the purposes of Part II.1 of the Environmental Protection Act

YK/
c: DWMD Supervisor, MOE Toronto, York-Durham and Halton-Peel
Steve English, The Regional Municipality of Halton
Nicole Visschedyk, MOE Modernization of Approvals Branch