

Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 4731-BNNT5Y Issue Date: April 20, 2020

Clean Harbors Canada, Inc. 4090 Telfer Road St. Clair, Ontario N0N 1G0

Site Location: 4090 Telfer Road Lot 8 and 9, Concession 10 Township of St. Clair County of Lambton N0N 1G0

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

sewage works for the collection, treatment and disposal of contact stormwater, process wastewater, and sanitary sewage from the above mentioned Site Location, consisting of:

PROPOSED WORKS:

CONTACT STORMWATER MANAGEMENT FACILITY

construction of new stormwater management facilities to replace the existing stormwater management facilities for the collection and conveyance of <u>contact stormwater runoff</u> from storm events of up to 1:100 year return frequency from a total drainage area of 97.49 ha of the Clean Harbors Lambton Facility located at Part Lot 8, Lot 9, Concession 10, Telfer Side Road, St. Clair Township, County of Lambton, Ontario, consisting of:

Perimeter Ditches

• One (1) approximately 216.5 m long perimeter ditch (Northwest Perimeter Ditch - C1), having an average depth of approximately 1.0 m, a bottom width of approximately 1.0 m, highest bottom elevation of 204.99 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the Northwest Perimeter Ditch (Bordering Cell 18 - C2 described

below;

- One (1) approximately 219.3 m long perimeter ditch (Northwest Perimeter Ditch (Bordering Cell 18) C2), having an average depth of approximately 1.0 m, a bottom width of approximately 1.0 m, highest bottom elevation of 204.35 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the North Perimeter Ditch (Bordering Cell 18) C3 described below;
- One (1) approximately 261.3 m long perimeter ditch (North Perimeter Ditch (Bordering Cell 18) C3), having an average depth of approximately 1.0 m, a bottom width of approximately 1.0 m, highest bottom elevation of 203.69 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the North Perimeter Ditch C6 described below;
- One (1) approximately 266.9 m long perimeter ditch (South Boundary Perimeter Ditch (Bordering Cell 18) C4), having an average depth of approximately 1.0 m, a bottom width of approximately 1.0 m, highest bottom elevation of 204.35 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the East Boudary Perimeter Ditch (On Cell 18 C5 described below;
- One (1) approximately 220.8 m long perimeter ditch (East Boundary Perimeter Ditch (Bordering Cell 18) C5), having an average depth of approximately 1.0 m, a bottom width of approximately 1.0 m, highest bottom elevation of 203.69 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the North Perimeter Ditch C6 described below;
- One (1) approximately 375.9 m long perimeter ditch (North Perimeter Ditch C6), having an average depth of approximately 1.0 m, a bottom width of approximately 2.50 m, highest bottom elevation of 202.90 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the Northeast Perimeter Ditch C7-1 described below;
- One (1) approximately 506.2 m long perimeter ditch (Northeast Perimeter Ditch C7-1), having an average depth of approximately 2.25 m, a bottom width of approximately 5.00 m, highest bottom elevation of 201.85 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the East Perimeter Ditch C7-2 described below;
- One (1) approximately 390.2 m long perimeter ditch (East Perimeter Ditch C7-2), having an average depth of approximately 2.25 m, a bottom width of approximately 5.00 m, highest bottom elevation of 200.34 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the Southeast Perimeter Ditch C7-3 described below;
- One (1) approximately 138.9 m long perimeter ditch (Southeast Perimeter Ditch C7-3), having an average depth of approximately 2.25 m, a bottom width of approximately 5.00 m, highest bottom elevation of 199.18 m AMSL, and side slopes of 3H:1V, horizontal slope of

0.3%, discharging to the Southeast Perimeter Ditch - C8 described below;

- One (1) approximately 31.0 m long perimeter ditch (Southeast Perimeter Ditch C8), having an average depth of approximately 2.25 m, a bottom width of approximately 5.00 m, highest bottom elevation of 198.76 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to the Southeast Perimeter Ditch Connecting to Pond A C9 described below;
- One (1) approximately 25.0 m long perimeter ditch (Southeast Perimeter Ditch -Connecting to Pond A - C9), having an average depth of approximately 2.32 m, a bottom width of approximately 5.00 m, highest bottom elevation of 198.69 m AMSL, and side slopes of 3H:1V, horizontal slope of 0.3%, discharging to Pond A described below;

Contact Stormwater Management Ponds

Pond A

• One (1) extended wet detention stormwater pond (**Pond A**) located at the southeast corner of the site, having an approximate top length of 177 m, a top width of 76 m, depth of 5.0 m, side slopes of 3H:1V, bottom elevation of 196.00 m AMSL, permanent pool elevation of 197.00 m AMSL, and extended detention elevation of 199.82 m AMSL, providing a permanent storage capacity of 4,941 m³ and an extended storage capacity of 31,569 m³, discharging to Pond B described below;

Pond B

• One (1) extended wet detention stormwater pond (**Pond B**) located at the south part of the site, having an approximate top length of 571 m, a top width of 40 m, depth of 5.0 m, side slopes of 3H:1V, bottom elevation of 196.00 m AMSL, permanent pool elevation of 197.00 m AMSL, and extended detention elevation of 199.82 m AMSL, providing a permanent storage capacity of 6,949 m³ and an extended storage capacity of 61,721 m³, discharging to Pond C described below;

Pond C

• One (1) extended wet detention stormwater pond (**Pond C**) located at the southwest part of the site, having an approximate top length of 109 m, a top width of 100 m, depth of 5.0 m, side slopes of 3H:1V, bottom elevation of 196.00 m AMSL, permanent pool elevation of 197.00 m AMSL, and extended detention elevation of 199.82 m AMSL, providing a permanent storage capacity of 18,815 m³ and an extended storage capacity of 97,549 m³, discharging to Pond D described below;

Pond D

• One (1) extended wet detention stormwater pond (**Pond D**) located at the southwest corner of

the site, having an approximate top length of 109 m, a top width of 40 m, depth of 5.0 m, side slopes of 3H:1V, bottom elevation of 196.00 m AMSL, permanent pool elevation of 197.00 m AMSL, and extended detention elevation of 199.82 m AMSL, providing a permanent storage capacity of 952 m³ and an extended storage capacity of 10,798 m³, discharging to the Wastewater (Contact Stormwater) Treatment Plant described below; and

• Including all controls and associated appurtenances.

PREVIOUS WORKS

CONTACT STORMWATER MANAGEMENT FACILITY

The following previously approved contact stormwater management facilities shall be in operation until replaced and decommissioned progressively by the Proposed Works (Contact Stormwater Management Facility) approved under this Approval following the landfill expansion time lines:

PREVIOUS WORKS APPROVED ON OCTOBER 19, 2015 UNDER ECA No. 1065-9VVJSW:

Modifications to the existing stormwater management facilities and addition of new stormwater management facilities for the collection and conveyance of <u>contact stormwater runoff</u> from storm events of up to 1:100 year return frequency from a total drainage area of 85.99 ha of the Clean Harbors Lambton Facility located at Part Lot 8, Lot 9, Concession 10, Telfer Side Road, St. Clair Township, County of Lambton, Ontario, consisting of:

North Pond 1

- One (1) approximately 670 m long perimeter ditch (North Perimeter Ditch) servicing a total drainage area of 14.41 ha having a bottom width of approximately 1.0 m, side slopes of 3H:1V, horizontal slope of 0.3%, and minimum depth of 0.5 m discharging to the North Pond 1 described below;
- One (1) extended wet detention stormwater pond (North Pond 1) located at the northern part of the site, servicing a total drainage area of 14.41 ha, having an approximate top length of 240 m, a top width of 45 m, bottom width of 3.0 m, side slopes of 2H:1V, bottom elevation of 192.00 m AMSL, permanent pool elevation of 195.40 m AMSL, and extended detention elevation of 199.20 m AMSL, providing a permanent storage capacity of 3,603 m³ and an extended storage capacity of 16,180 m³, equipped with two (2) 14.1 L/sec @ 5.4 m TDH capacity pumps (one duty, one standby) discharging through one (1) 250 mm diameter forcemain to West Perimeter Ditch 1 described below;

North Pond 2

• One (1) approximately 188 m long perimeter ditch (West Perimeter Ditch 1) servicing a

total drainage area of 10.75 ha, having a bottom width of approximately 1.0 m, side slopes of 3H:1V, horizontal slope of 0.8%, and minimum depth of 0.5 m discharging to the North Pond 2 described below;

• One (1) extended wet detention stormwater pond (**North Pond 2**) located at the western side of the site, having an approximate top length of 104 m, a top width of 40 m, side slopes of 2H:1V, bottom elevation of 193.00 m AMSL, permanent pool elevation of 195.80 m AMSL, and extended detention elevation of 200.70 m AMSL, providing a permanent storage capacity of 2,688 m³ and an extended storage capacity of 12,280 m³, equipped with two (2) 10.7 L/sec @ 5.5 m TDH capacity pumps (one duty, one standby) discharging through one (1) 250 mm diameter forcemain to West Perimeter Ditch 2 described below;

Southwest Pond

• One (1) extended wet detention stormwater pond (**Southwest Pond**) located at the western side of the site, having an approximate top length of 138 m, a top width of 68 m, a bottom width of 19.0 m, side slopes of 2H:1V, bottom elevation of 188.50 m AMSL, permanent pool elevation of 191.20 m AMSL, and extended detention elevation of 197.10 m AMSL, providing a permanent storage capacity of 5,978 m³ and an extended storage capacity of 27,340 m³, equipped with two (2) 27.1 L/sec capacity pumps (one duty, one standby) discharging through one (1) 250 mm diameter forcemain to the West Pond described below;

East Pond

- One (1) approximately 388 m long perimeter ditch (Southeast Perimeter Ditch) servicing a total drainage area of 5.34 ha having a bottom width of approximately 1.0 m, side slopes of 3H:1V, horizontal slope of 0.4%, and minimum depth of 0.5 m discharging to the East Pond described below;
- One (1) approximately 1092 m long perimeter ditch (East Perimeter Ditch) servicing a total drainage area of 31.58 ha having a bottom width of approximately 1.0 m, side slopes of 3H:1V, horizontal slope of 0.3%, and minimum depth of 0.5 m discharging to the East Pond described below;
- One (1) extended wet detention stormwater pond (**East Pond**) located at the southeast side of the site, servicing a total drainage area of 36.92 ha, having an approximate top length of 88 m, a top width of 87 m, a bottom width of 19.0 m, side slopes of 2H:1V, bottom elevation of 184.00 m AMSL, permanent pool elevation of 190.70 m AMSL, and extended detention elevation of 198.00 m AMSL, providing a permanent storage capacity of 9,230 m³ and an extended storage capacity of 31,014 m³ (total storage capacity of 40,244 m³), equipped with two (2) 27.1 L/sec @ 9.2 m TDH capacity pumps (one duty, one standby) discharging through one (1) 300 mm diameter forcemain to the West Pond described below;
- Two (2) 128.1 L/sec @ 11.0 m TDH capacity overflow pumps (one duty, one standby)

discharging through one (1) 600 mm diameter forcemain to the West Pond described below; and

• Including all controls and associated appurtenances.

West Pond

- One (1) approximately 500 m long perimeter ditch (West Perimeter Ditch 2) having a bottom width of approximately 1.0 m, side slopes of 3H:1V, horizontal slope of 0.3%, and minimum depth of 0.5 m discharging to the West Pond described below;
- One (1) approximately 786 m long perimeter ditch (Waste Dump Ditch) servicing a total drainage area of 15.08 ha having a bottom width of approximately 1.0 m, side slopes of 3H:1V, horizontal slope of 0.7%, and minimum depth of 0.5 m discharging to the West Pond described below;
- One (1) approximately 366 m long perimeter ditch (Southwest Perimeter Ditch) servicing a total drainage area of 8.83 ha having a bottom width of approximately 1.0 m, side slopes of 3H:1V, horizontal slope of 0.5%, and minimum depth of 0.5 m discharging to the West Pond described below;
- One (1) extended wet detention stormwater pond (**West Pond**) located at the western side of the site, servicing a total drainage area of 23.91 ha, having an approximate top length of 188 m, a top width of 34 m, and a depth of 4.0 m, bottom elevation of 188.50 m AMSL, permanent pool elevation of 191.20 m AMSL, and extended detention elevation of 197.10 m AMSL, providing a permanent storage capacity of 5,948 m³ and an extended storage capacity of 28,052 m³, equipped with one (1) overflow weir at invert elevation of 198.00 m AMSL discharging to the Southwest Pond described below, and one (1) 1000 L/min capacity pump discharging through one (1) 100 mm diameter forcemain to Wastewater Treatment Plant described below.

CONTACT STORMWATER TREATMENT FACILITY

PREVIOUS WORKS APPROVED ON OR BEFORE AUGUST 26, 2005:

Upgrade/Modifications to the existing sewage works for the treatment and disposal of <u>contact</u> <u>stormwater runoff</u> from the Clean Harbors Lambton Facility located at Lot 8, Lot 9, Concession 10, Telfer Side Road, St. Clair Township, County of Lambton, Ontario, consisting of:

Contact Stormwater Treatment Plant with a rated treatment capacity of 4,500 m^3 /day treating stormwater runoff from the West Pond, consisting of:

two (2) influent pumps (one duty, one standby) each with rated capacity of 22.7 L/sec at 310 kPa (300 IGPM at 45 psig);

- two (2) sand filters, each 3.6 m outside diameter and 1.8 m high, containing 6.4 m³ of 0.3 mm silica sand and 3.2 m³ of 1.0 mm anthracite, equipped with a backwash pump rated 49.3 L/sec at 138 kPa (650 IGPM at 20 psig);
- one (1) activated carbon filter consisting of a concrete above-ground basin with overall dimension of 2.4 m high, 4.3 m long and 1.8 m wide, containing 1.2 m³ of 20 mm clear crushed stone and 14.2 m³ of granulated activated carbon (G.A.C.); and
- one (1) Equalization Pond (**EQ Pond**) with a storage volume of 4,500 m³ and overall dimensions of 37 m long, 26 m wide, and 6.7 m deep, discharging treated effluent into the Telfer Side Road drainage ditch.

NON-CONTACT STORMWATER MANAGEMENT FACILITY

PREVIOUS WORKS APPROVED ON SEPTEMBER 4, 2007 UNDER ECA No. 0598-76DK8Q:

The establishment of sewage works for the collection, treatment and disposal of stormwater runoff from the capped waste disposal cells and office buildings of Lambton Facility located at 4090 Telfer Road to service a 0.6 ha drainage area consisting of roof drainage from the administration building, laboratory and operations building, a gravel parking lot, paved surface area, and grassed area, designed to convey stormwater runoff from storm events with up to 1:50 year return frequency to the Telfer Road Drain, consisting of the following:

- A roof drainage collection system collecting roof drainage from the garage building and discharging through a drain pipe to a drainage ditch described below;
- One (1) V-shaped drainage ditch with approximate length of 290 m, minimum depth of 300 mm, maximum depth of 500 mm, minimum top width of 1.3 m, and a maximum top width of 2 m, extending from the administration building in a southerly direction and then westerly direction discharging to the Telfer Road Drain;
- One (1) approximately 50 m long concrete curb installed along the south side of the above described drainage ditch to segregate potential contaminated stormwater runoff from Process Area-I located on the east and south side of the subject 0.6 ha drainage area; and
- Including all controls and associated appurtenances.

SANITARY SEWAGE

PREVIOUS WORKS APPROVED ON OCTOBER 19, 2015 UNDER ECA No. 1065-9VVJSW:

An existing subsurface disposal system for the collection, transmission, treatment and disposal of

domestic sewage with a Rated Capacity of 14,333 L/day, serving the Clean Harbors Lambton Facility, located at 4090 Telfer Road, in the Township of St. Clair, consisting of the following:

- A one-compartment precast concrete holding tank (ordered to be installed by the Provincial Officer's Order Number 2131-9E9RMY issued December 11, 2013) located approximately 22 m south of the Thermal Desorption Unit (T.D.U.) Building, having a total capacity of 9,092 litres, to be vented in compliance with requirements as per the OBC, equipped with a waterproof lockable access opening and a high level alarm system connected to a device that shall produce an audible and visual warning alarm, collecting raw sewage from the T.D.U. Hygiene Trailer via a gravity sewer pipe with a minimum slope of 2%, pumped out on a regular basis by a licensed sewage hauler;
- A one-compartment precast concrete holding tank (approved by Ministry of the Environment Use Permit for Class 4, 5,6 Sewage Systems Application No. SL-063-89 issued May 18, 1989) located approximately 37 m north of the Water Treatment Building and approximately 85 m west of the Incineration Pit, having a total capacity of 9,092 L, to be vented in compliance with requirements as per the OBC, equipped with a waterproof lockable access opening and a high level alarm system connected to a device that shall produce an audible and visual warning alarm, collecting raw sewage from a construction office via a gravity sewer pipe with a minimum slope of 2%, pumped out on a regular basis by a licensed sewage hauler;
- A two-compartment precast concrete septic tank (approved by Ministry of the Environment Use Permit for Class 4, 5,6 Sewage Systems Application No. SL-154-79 issued November 20, 1979) located approximately 4 m south of the Laboratory Building, having a capacity of 7,600 L, collecting 1,010 L/day of raw sewage from the Laboratory Building, equipped with an approved effluent filter and discharging by gravity to a pump chamber;
- 100 mm and 150 mm diameter on-site gravity sanitary sewers collecting raw sewage from the Pretest Building, the Incinerator Building, the Vehicle Maintenance Garage, and the Administration Building discharging to a septic tank having a capacity of 13,638 L;
- A two-compartment precast concrete septic tank (approved by Ministry of the Environment Use Permit for Class 4, 5,6 Sewage Systems Application No. SL-261-89 issued August 24, 1990) located approximately 26 m south of the Laboratory Building and approximately 18 m north of the Vehicle Maintenance Garage, having a capacity of 13,638 L, collecting raw sewage from the Pretest Building, the Incinerator Building, the Vehicle Maintenance Garage and the Administration Building, resulting in a combined flow of 7,289 L/day, equipped with an approved effluent filter and discharging by gravity to a pump chamber;
- A 1.2 m diameter one-compartment pump chamber (approved by Ministry of the Environment Use Permit for Class 4, 5,6 Sewage Systems Application No. SL-261-89 issued August 24, 1990), located downstream of the septic tanks, housing two (2) Myers WHR 1/2 HP submersible effluent pumps, equipped with a watertight access cover and level regulators including a high level alarm system, discharging via a 50 mm diameter forcemain to a

subsurface disposal system;

• A subsurface disposal system consisting of fully raised filter bed (approved by Ministry of the Environment Use Permit for Class 4, 5,6 Sewage Systems Application No. SL-261-89 issued August 24, 1990) located approximately 28 m south of the Laboratory Building and approximately 60 m west of the Vehicle Maintenance Garage, having a treatment capacity of 18,288 L/day, constructed of imported sand fill with a percolation time of T = 4 minutes per centimetre, having a total length of distribution piping of 365 m of 100 mm diameter perforated distribution piping installed in twelve (12) - 30 m long runs installed within the clear stone layer and overlaying the sand fill, complete with a minimum 250 mm thick sand mantle extending a minimum of 15 m beyond the outermost distribution pipes in any direction which effluent will move laterally in the soil away from the filter bed, all in accordance with the Ontario Building Code requirements;

including all other controls, electrical equipment, instrumentation, piping, valves and appurtenances essential for the proper operation of the aforementioned sewage works;

all in accordance with supporting documents listed in Schedule A.

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

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

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

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

"District Manager" means the District Manager of the Sarnia District Office;

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

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

"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;

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

"Owner" means Clean Harbors Canada Inc. and includes its successors and assignees;

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

"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, and to the extent approved by this Approval;

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

PART I - GENERAL

1. <u>GENERAL PROVISIONS</u>

- (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 issuance of, and compliance with the conditions of, this Approval does not:
 - (a) relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority, necessary to construct or operate the Works; or
 - (b) limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. <u>EXPIRY OF APPROVAL</u>

(1) The approval issued by this Approval will cease to apply to those parts of the Previous Works which have not been constructed within five (5) years of their respective date of approval outlined in this Approval. The approval issued by this Approval will cease to apply to those parts of the Proposed Works which have not been constructed prior to a planned expansion of an adjacent landfill cell serviced by that particular Proposed Works to ensure that appropriate stormwater run-off storage capacity of the Works is maintained.

3. <u>CHANGE OF OWNER</u>

- (1) The Owner shall notify the District Manager 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 <u>Business Names Act</u>, R.S.O. 1990, c.B17 shall be included in the notification to the District Manager; and
 - (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 <u>Corporations Information Act</u>, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager;
- (2) In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of

this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

PART II - CONTACT STORMWATER MANAGEMENT

4. <u>EFFLUENT OBJECTIVES</u>

- (1) Within twelve (12) months of the issuance date of this Approval, the Owner shall prepare and submit for approval to the District Manager a "Contingency and Remedial Action Plan" for the Works (**Contact Stormwater Management Facility**) which shall provide detailed action plans to mitigate any potential leachate impact to the non-contact stormwater caused by leachate spills or seeps from the landfill site that will be implemented during any event which set off the effluent objective trigger(s) set under subsection (2) and subsection (3).
- (2) To serve as part of a trigger mechanism for the implementation of the "Contingency and Remedial Action Plan" for the Works, the Owner shall install an elevation monitoring system for the perimeter Leachate Collection System (LCS) and Pond D or West Pond of the Contact Stormwater Management Ponds and the Owner shall ensure that the perimeter LCS elevation is at least 0.25 m lower than the elevation of Pond D or West Pond.
- (3) To serve as part of a trigger mechanism for the implementation of the "Contingency and Remedial Action Plan" for the Works, the Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the VOCs parameters identified in Table 4 under Condition 9 (2) – Contact Stormwater Monitoring Parameter List at the contact stormwater pond Pond D or West Pond are below the **non-detectable level**.
- (4) In the event of any instance when the trigger mechanism specified under subsection (2) is triggered for a period greater than forty eight (48) hours, then, the Owner shall conduct the following monitoring:
 - (a) Weekly visual inspection of the interior slopes of the stormwater ditch and pond edges adjacent to the total length of the perimeter LCS for a leachate seep;
 - (b) Collection of weekly samples for VOCs parameters identified in Table 4 under Condition 9 (2) - Contact Stormwater Monitoring Parameters List at the following sampling locations:
 - (i) the inlet to the contact stormwater treatment plant if the plant is operating or from the Pond D or West Pond if the plant is not operating;
 - (ii) the outlet from the stormwater ditch to Pond A or East Pond;

- (c) Weekly review and assessment of LCS elevation data, Pond D or West Pond stormwater elevation data, VOCs concentration levels, and leachate disposal rate to assess return to normal operating levels.
- (5) Trigger level monitoring conducted under subsection (4) shall cease one (1) week after the LCS level has ceased to be at or above the trigger level.
- (6) If trigger monitoring results obtained under subsection 4 (b) indicate the presence of VOCs above detection levels, then, the Owner shall notify the District Manager within two (2) days of receipt of the monitoring results and details about the implementation of the "Contingency and Remedial Action Plan" for the Works.
- (7) Within three (3) months of an event activating the "Contingency and Remedial Action Plan" for the Works, the Owner shall submit a detailed report to the District Manager including a detailed description of the remedial measures implemented and any proposed control measures and their respective implementation time lines. The Owner shall include the additional sample analysis conducted as per subsection (3) in the annual reports submitted in accordance with Condition 12.
- (8) Based on a detailed assessment report of the quality of leachate and noncontact stormwater monitoring results, the Owner may submit to the District Manager a proposal for an alternate trigger parameter(s) with respective trigger concentration level(s) to be used for the "Contingency and Remedial Action Plan" for the Works.

5. <u>EFFLUENT LIMITS</u>

(1) The Owner shall design, construct and operate the works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the works being allowed to be discharged from the equalization pond (EQ Pond) into Telfer Side Road drainage ditch.

Table 1 - Effluent Limits			
Effluent Parameter	Concentration Limit (milligrams per litre unless otherwise indicated)		
Column 1	Column 2		
Total Suspended Solids	15.0		
Solvent Extractables	15.0		
Phenols	0.02		
pH of the effluent maintained between 5.5 to 9.5, inclusive, at all times			

- (2) For the purposes of determining compliance with and enforcing subsection (1):
 - (a) The Daily Concentration of a parameter named in Column 1 of subsection (1) shall not exceed the corresponding maximum concentration set out in Column 2

of subsection (1).

(b) The pH of the effluent shall be maintained between 5.5 to 9.5 at all times.

6. <u>EFFLUENT - VISUAL OBSERVATIONS</u>

(1) Notwithstanding any other condition in this Approval, the Owner shall 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, sheen or foam on the receiving waters.

7. <u>EFFLUENT MONITORING AND RECORDING</u>

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) Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed:

Table 2 - Effluent Monitoring - Equalization Pond (EQ Pond)		
Frequency	Daily During Discharge Period	
Sample Type	Grab	
Parameters	Total Suspended Solids, Solvent Extractables, Phenols,	
	and pH	

- (3) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
 - (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended from time to time by more recently published editions; and
 - (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions;
- (4) A continuous flow measuring device(s) shall be installed and maintained to measure the flow rate of the effluent from the sewage works, with an accuracy to within plus or minus fifteen (15) per cent of the actual flow rate for the entire design range of the flow measuring device and the Owner shall measure, record and calculate the total volume of effluent discharged from the equalization pond into Telfer Side Road drainage ditch; and
- (5) 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.

8. <u>OPERATION AND MAINTENANCE</u>

- (1) The Owner shall not allow the discharge of wastewater from the equalization pond if any grab sample collected from works fails to meet any of the effluent quality limits set under condition 5. The wastewater contained in the equalization pond that failed to meet the effluent limits set under condition 5 shall be returned to the approved storage pond for further treatment.
- (2) The Works approved herein shall be used only for the collection, treatment and disposal of stormwater runoff from the covered landfill disposal areas and other parts of the site with the exception of those areas used for the processing of waste materials.
- (3) Under no circumstances shall untreated stormwater run-off be discharged from the property.
- (4) 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) contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the District Manager; and
 - (e) complaint procedures for receiving and responding to public complaints.
- (5) The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

9. CONTACT STORMWATER CHARACTERIZATION MONITORING PROGRAM

The Owner shall carry out the following contact stormwater characterization monitoring program to establish a monitoring database to assess the quality of the stormwater generated from the site and handled by the contact stormwater management facility:

- (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 of the effluent stream over the time period being monitored.
- (2) Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed:

Table 3 - Contact Stormwater Monitoring Program				
Sample Type: Grab				
Monitoring Location	Parameters ^(NOTE 1)	Frequency	Notes	
EQ Pond Discharge	Solvent Extractable,	Monthly Discharge	(2)	
	Microtox, General			
	Chemistry, Metals,			
	VOCs, sVOCs			
EQ Pond	Fish Presence	Monthly Discharge	-	
West Pond or Pond D	General Chemistry,	Monthly Discharge	-	
	Metals, VOCs, sVOCs			
East Pond or Pond A	General Chemistry,	Monthly Discharge	-	
	Metals, VOCs, sVOCs			
STN6 (off-site background)	General Chemistry,	Spring and late	(3)	
	Metals	Summer/Fall		
STN6A (off-site	General Chemistry,	Spring and late	(3)	
downstream)	Metals	Summer/Fall		

Note (1): General Chemistry, Metals, VOCs, and sVOCs parameters as the detailed list provided in Table 4 below.

- **Note (2):** Samples to be collected during a discharge event from the EQ Pond within 25 to 35 days after the previous samples were collected.
- **Note (3):** Samples to be collected during discharge from the Site and on the same day as Monthly Discharge samples.

Table 4 - Contact Stormwater Monitoring				
Parameters List				
General	Alkalinity (total as CaCO3), Ammonia-N, Bromide (dissolved), Chemical			
Chemistry	Oxygen Demand (COD), Chloride (dissolved), Conductivity (umhos/cm),			
Parameters	Cyanide (total), Dissolved Organic Carbon (DOC), Fluoride, Hardness, Nitrate			
	(as N), Nitrite (as N), pH (field), pH (lab), Phenolics (total), Phosphorus (total),			
	Sulfate (dissolved), Temperature (field), Total Dissolved Solids (TDS), Total			
	Kjeldahl Nitrogen (TKN), Total Suspended Solids (TSS), Un-ionized Ammonia			
Metals (Total and	Aluminium, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron,			
Dissolved)	Cadmium, Calcium, Chromium (Hexavalent), Cobalt, Copper, Iron, Lead,			
Parameters	Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium,			
	Silicon, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc			
VOCs Parameters	1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane,			
	1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,2-Dibromoethane (Ethylene			
	dibromide), 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane,			
	1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Butanone (Methyl ethyl ketone),			
	4-Methyl-2-pentanone (Methyl isobutyl ketone), Acetone, Benzene,			
	Bromodichloromethane, Bromotorm, Bromomethane (Methyl bromide),			
	(Tricklammethane) sig 1.2 Dicklamethane, sig 1.2 Dicklamethane			
	(Inchloromethane), cls-1,2-Dichloroethene, cls-1,3-Dichloropropene, Dibromachloromethana, Dichlorodifluoromethana (CEC 12), Ethylbonzona			
	Hexane m&n Xylenes Methyl tert butyl ether (MTRE) Methylene chloride			
	o-Xylene Styrene Tetrachloroethene Toluene trans-1 2-Dichloroethene			
	trans_1.3-Dichloropropene. Trichloroethene. Trichlorofluoromethane (CEC-11)			
	Vinyl Chloride, Xylenes (total)			
Semi-VOCs	1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene,			
Parameters	1,4-Dichlorobenzene, 1-Methylnaphthalene,			
	2,3,4,5-Tetrachlorophenol/2,3,4,6-Tetrachlorophenol, 2,3,6-Trichlorophenol,			
	2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol,			
	2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene,			
	2-Chlorophenol, 2-Methylnaphthalene, 3,3'-Dichlorobenzidine,			
	4-Chloroaniline, Acenaphthene, Acenaphthylene, Anthracene,			
	Benzo(a)anthracene, Benzo(a)pyrene,			
	Benzo(b)flouranthene/Benzo(j)fluoranthene, Benzo(g,h,i)perylene,			
	Benzo(k)fluoranthene, bis(2-Chloroethy)ether, bis(ethylhexy)phthalate			
	(DEHP), Unrysene, Dibenz(a,n)anthracene, Diethyl phthalate, Dimethyl			
	Indexe(1.2.2. ad)rymona, Narhtholana, Partachlaracharal, Partachlarach			
	Dependence Dynamic Naphinaiene, Pentachiorophenoi, Perylene,			
	Phenanthrene, Pyrene			

- (3) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
 - (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as

amended from time to time by more recently published editions; and

- (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions.
- (4) Upon collecting contact stormwater monitoring data under subsection (2) for a period of five (5) years, the Owner shall prepare an assessment report on the quality of contact stormwater generated at the site and a proposal for a monitoring program for the contact stormwater. The Owner shall submit the prepared assessment report and proposed monitoring program for the contact stormwater to the Regional Technical Support Section for review and recommendation.
- (5) Upon receiving the review and recommendation from the Regional Technical Support Section, the Owner shall submit an application for amendment of this Approval to include the recommended contact stormwater monitoring program.

PART IV - SANITARY SEWAGE

10. OPERATION, PERFORMANCE, MONITORING AND RECORDING

- (1) The Owner shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the Works do not constitute a safety or health hazard to the general public.
- (2) The Owner shall ensure that at all times, the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.
- (3) The Owner shall maintain and service the Works in such a manner that leaks and spills are prevented.
- (4) The Owner shall have a valid Agreement with a licensed hauled sewage system operator for the disposal of sanitary sewage from the holding tanks, on an as required basis, and shall keep a copy of the valid Agreement at all times during the operation of the Works.
- (5) The Owner shall maintain a logbook to record the clean outs of the holding tanks and shall keep the log book at the site for inspection by the Ministry. The logbook shall include the following:
 - (a) the name and signature of the person(s) that conducted the clean out;
 - (b) the date and time of the clean out;
 - (c) an estimate of the quantity of materials that are removed from the holding tanks;

and

- (d) observances (including location) of any leaks and/or spills at or around any component of the Works, including recommendations for remedial action and the actions taken to mitigate the situation.
- (6) In the event a leak is observed from any component of the holding tanks, the Owner shall ensure that the sewage discharge to the tanks is discontinued and the incident immediately reported verbally to the District Manager, followed by a written report within one (1) week. The Owner shall ensure that during the time remedial actions are taking place, sewage shall not be allowed to discharge to a surface water body or to the environment, and safely collected and disposed off through a licensed waste hauler to an approved waste disposal site.
- (7) The Owner shall use best efforts to immediately identify and clean up all spills.
- (8) The Owner shall ensure that the daily quantities of effluent being disposed of through the existing subsurface disposal systems shall be measured or estimated through water use to respective buildings, and recorded, and upon request, shall make the recorded information available for inspection by Ministry staff and staff of the local municipality.
- (9) The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal bed area, and that adequate steps are taken to ensure that the area of the underground works are protected from vehicle traffic.
- (10) The Owner shall visually inspect Works on a monthly (once every month) basis and ensure that in the event of any sewage break-outs observed, sewage discharge to the subsurface disposal bed is discontinued and the incident immediately reported verbally to the District Manager, followed by a written report within one (1) week. The Owner shall ensure that during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to a surface water body or to the environment, and safely collected and disposed off through a licensed waste hauler to an approved waste disposal site.
- (11) The Owner shall ensure that the septic tank is inspected at a minimum frequency of once every year and pumped-out by a licensed hauler if necessary, with a minimum pump-out frequency of at least once per three to five year period (when sludge accumulation reaches one-third of the effective volume).
- (12) The Owner shall ensure that the effluent filter is cleaned out at a minimum frequency of once a year or more often if recommended by the manufacturer.
- (13) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to the operations and maintenance activities required by

this Approval.

PART V - GENERAL

11. <u>LIMITED OPERATIONAL FLEXIBILITY</u>

- (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 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 <u>not</u> 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, 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) At least thirty (30) days 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 District Manager.
- (9) The Owner shall not proceed with implementation of Limited Operational Flexibility until the District Manager has provided written acceptance of the Notice of Modifications or a minimum of thirty (30) days have passed since the day the District Manager acknowledged the receipt of the Notice of Modifications.

12. <u>REPORTING</u>

- (1) The Owner shall notify the District Manager in writing one month prior to the date of commencement of operation of any of the Proposed Works (Pond A, Pond B, Pond C and Pond D).
- (2) The Owner shall report to the District Manager or designate, any exceedence of any parameter specified in Condition 5 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 EPA, 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 District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
- (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 District Manager a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
 - (a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 5, 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 tabulation of volumes of effluent discharged from the Works (Contact Stormwater Treatment) into the receiving municipal drain during the reporting period;
- (f) a tabulation of the date, time and volume of septage pump outs from the sanitary sewage holding tanks in the reporting period;
- (g) a tabulation of the measured or estimated daily quantities of sanitary sewage effluent disposed of through the subsurface disposal system during the reporting period;
- (h) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (i) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (j) a copy of all Notice of Modifications submitted to the District Manager 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
- (1) any other information the District Manager requires from time to time.

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the 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 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 5 are exceeded.
- 5. Conditions 5 and 6 imposed to ensure that the effluent discharged from the Works to the Telfer Road Drain 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.
- 6. Condition 7 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 effluent limits specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.
- 7. Conditions 8 and 10 are 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.
- 8. Condition 9 is included to assess the site conditions in terms of potential contamination to surface water associated with the hazardous wastes handled at the site.
- 9. 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 of this Approval, MECP policies, guidelines, and industry engineering standards and best

management practices.

10. 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.

SCHEDULE 'A'

I PREVIOUS WORKS APPROVED ON OR BEFORE SEPTEMBER 4, 2007:

All in accordance with the Applications for the Approval of Industrial Sewage Works including drawings and design specification submitted by Safety-Kleen Ltd. dated April 12, 2001 and November 15, 2001, and the following supporting documentation:

- 1. "Notice of Approval to Proceed with the Undertaking (and Order Under Subsection 12.4(3) Hazardous Waste Landfill Expansion Order in Council 960/97".
- 2. "Landfill Service Continuation Environmental Assessment Executive Summary" Laidlaw Environmental Services Ltd. 1996.
- 3. "Landfill Service Continuation Environmental Assessment Surface Water Technical Report" Laidlaw Environmental Services Ltd. April 1996.
- 4. "Appendix G 2000 Annual Landfill Report, Safety-Kleen Ltd., Lambton Facility" -Prepared in accordance with the requirements of Condition 15 of Provisional Certificate of Approval No. A031806, dated September 5, 1997.
- 5. A letter from Safety-Kleen sent to the attention of Mr. Stefanos Habtom, MECP, dated November 8, 2001, regarding the changes made to the pumping station.
- 6. A letter from Dean Edwardson, Clean Harbors Canada Inc., dated July 4, 2005 providing supporting documentation for the deletion of Condition 3.2 of the existing Certificate of Approval regarding the dilution requirements for discharges to the Telfer Side Road drainage ditch.

II. PREVIOUS WORKS APPROVED ON SEPTEMBER 4, 2007 UNDER ECA No. 0598-76DK8Q:

All in accordance with an Application for Approval of Industrial Sewage Works submitted by Clean Harbors Canada Inc. dated November 14, 2006, and design specifications and drawings prepared by Gartner Lee Limited, Markham, Ontario and the following document:

1. "Lambton Facility - Stormwater Management Plan in Support of Amendment to Certificate of Approval" dated July 2007, prepared by Gartner Lee Limited, Markham, Ontario.

III. PREVIOUS WORKS APPROVED ON OCTOBER 19, 2015 UNDER ECA No. 1065-9VVJSW:

Contact Stormwater and Process Wastewater:

1. Application for Environmental Compliance Approval submitted by Clean Harbors Canada

Inc., dated April 15, 2015 and engineering drawings and design brief prepared by Tetra Tech, Mississauga, Ontario.

2. Response to additional information request letter dated May 27, 2015 including a revised design brief titled "Stormwater Management Report - Lambton Landfill Expansion" dated June 2015 and revised engineering drawings prepared by Tetra Tech, Mississauga, Ontario.

Sanitary Sewage:

- 1. Environmental Compliance Approval Application submitted by Philip Keightley, P.Eng., BKL Engineering, dated March 20, 2014 and received March 21, 2014.
- 2. Design Report titled "Clean Harbors Canada Inc. Lambton Facility, 4090 Telfer Road, RR#1 Corunna Design Report for Sanitary Sewage" dated February 21, 2014, plans and specifications prepared by BKL Engineering.
- 3. Design flow calculations titled: "Clean Harbors Lambton Estimate of Sanitary Design Flow" prepared by BKL Engineering.
- 4. A site plan titled: "Septic System Site Plan" dated December 2013 and signed and stamped by Philip Keightley, P.Eng., BKL Engineering.

IV. PREVIOUS WORKS APPROVED ON SEPTEMBER 9, 2019 UNDER ECA No. 2985-B9KKP2

- 1. Environmental Compliance Approval Application submitted by Clean Harbors Canada Inc. dated October 3, 2018, plans and design specification prepared by GDH Limited, Waterloo, Ontario.
- "Surface Water Management Amendment Supporting Documentation ECA 1065-9VVJSW" Clean Harbors Canada Inc., no date, prepared by GDH Limited, Waterloo, Ontario.

V. PROPOSED WORKS:

1. Environmental Compliance Approval Application submitted by Clean Harbors Canada Inc. dated February 20, 2020, including documentation and information.

Schedule B

Limited Operational Flexibility Criteria for Modifications to Industrial Sewage Works

- 1. The modifications to sewage works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.
 - 1.1 Sewage Pumping Stations
 - a. Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the modifications do not result in an increase of the sewage treatment plant Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable.
 - 1.2 Sewage Treatment Process
 - a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.
 - b. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.
 - c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.
 - d. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the works that result in an increase of the Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.
 - e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same. For clarity purposes, the following equipment can be considered under this provision: screens, grit separators, blowers,

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

- 1.3 Sewage Treatment Plant Outfall
 - a. Replacement of discharge pipe with similar pipe size provided that the outfall location is not changed.

1.4 Sanitary Sewers

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

1.5 Pilot Systems

- a. Installation of pilot systems for new or existing technologies provided that:
 - i. any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,
 - ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
 - iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and District Manager 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.



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)

ECA Number I in		Date (mm/dd/yy)		Notice number (if applicable)	
				receipt menseer (n approache)	
CA Owner			Municipality		
Part 2: Description of Attach a detailed description of	of the modifica (the sewage works)	itions as part	of the L	imited Operational Flexibility	
escription shall include: A detail description of the mo type/model, material, process Confirmation that the anticipt List of updated versions of, o submission of documentation	difications and/or opera s name, etc.) sted environmental effe r amendments to, all re s not required, but the	tions to the sewage w cts are negligible. levant technical docur listing of updated doc	rorks (e.g. si nents that a	ewage work component, location, size, equipment re affected by the modifications as applicable, it design brief, drawings, emergency plan, etc.)	
Part 3 – Declaration	by Profession	al Engineer			
Part 3 – Declaration hereby declare that I have ver . Has been prepared or review . Has been designed in accorr . Has been designed consiste practices, and demonstrating hereby declare that to the bes	ified the scope and tech red by a Professional E fance with the Limited (nt with Ministry's Design ongoing compliance w t of my knowledge, info	nal Engineer ngineer who is license Destational Flexibility i in Guidelines, adhering ith s.53 of the Ontario rmation and belief the	nodification d to practice as described to engineer Water Reso information	and confirm that the design: e in the Province of Ontario; d in the ECA; ring standards, industry's best management surces Act; and other appropriate regulations, contained in this form is complete and accurate	
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Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 2985-B9KKP2 issued on September 9, 2019.

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:

- a. 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;
- b. 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:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. 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 Director appointed for the purposes of Part
The Secretary*		II.1 of the Environmental Protection Act
Environmental Review Tribunal		Ministry of the Environment, Conservation and
655 Bay Street, Suite 1500	AND	Parks
Toronto, Ontario		135 St. Clair Avenue West, 1st Floor
M5G 1E5		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

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The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act. DATED AT TORONTO this 20th day of April, 2020

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

AA/

c: District Manager, MECP Sarnia District Office Erica Carabott, Clean Harbors Environmental Services