

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1498-C4NFVU

Issue Date: October 27, 2021

RIC (1515 Thornton) Inc.
162 Cumberland Street, No. 300
Toronto, Ontario
M5R 3N5

Site Location: 1515 Thornton Road North
Part of Lot 16, Concession 4
Oshawa City, Regional Municipality of Durham

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

Description Section

An anaerobic digestion facility, consisting of the following processes and support units:

- Organic Waste receipt, pre-treatment and temporary storage;
- anaerobic digestion;
- digestate and biogas storage;
- digestate management;
- wastewater treatment;
- production of renewable natural gas through processing of biogas;
- one (1) enclosed flare system, for the incineration of up to 3,200 cubic metres per hour of biogas, discharging to the atmosphere through a 3.3 metre diameter exhaust, extending 12.2 metres above grade;
- one (1) air treatment system, consisting of an upstream carbon filter and bioscrubber and a two cell, down-flow biofilter containing engineered media to a depth of 1.5 metres, having an empty bed residence time of 47 seconds, with an area of 600 square metres, exhausting to the atmosphere through a 0.88 metre diameter stack, extending 20 metres above grade;

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to **200,000 tonnes of Organic Waste received per year** discharging to the air as described in the Original ESDM Report.

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

apply:

1. "ACB list" means the document entitled "Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", as amended from time to time and published by the Ministry and available on a Government website;
2. "Acceptable Point of Impingement Concentration" means a concentration accepted by the Ministry as not likely to cause an adverse effect for a Compound of Concern that,
 - a. is not identified in the ACB list, or
 - b. is identified in the ACB list as belonging to the category "Benchmark 2" and has a concentration at a Point of Impingement that exceeds the concentration set out for the contaminant in that document.With respect to the Original ESDM Report, the Acceptable Point of Impingement Concentration for a Compound of Concern mentioned above is the concentration set out in the Original ESDM Report;
3. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility. "Acoustic Assessment Report" also means the Acoustic Assessment Report dated January 12, 2021 and signed by Michael Masschaele, GHD;
4. "Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarising the results of the Acoustic Assessment Report, as updated in accordance with Condition 14 of this Approval;
5. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the performance limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233;
6. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233;
7. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility;
8. "AERMOD" means the dispersion model developed by the American

Meteorological Society/U.S. Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) including the PRIME (Plume Rise Model Enhancement) algorithm;

9. "Air Treatment System" means the air treatment system, including the Biofilter and Bioscrubber, described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
10. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
11. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
12. "Biofilter" means the biofilter described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
13. "Bioscrubber" means the bioscrubber described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
14. "Company" means RIC (1515 Thornton) Inc. that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
15. "Compound of Concern" means a contaminant described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged from the Facility in an amount that is not negligible;
16. "Description Section" means the section on page one of this Approval describing the Company's operations and the Equipment located at the Facility and specifying the Facility Production Limit for the Facility;
17. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;
18. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
19. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
20. "Environmental Assessment Act" means the *Environmental Assessment Act*, R.S.O. 1990, c.E.18;
21. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;

22. "Equipment" means equipment or processes described in the ESDM Report, the Acoustic Assessment Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
23. "Equipment with Specific Operational Limits" means the enclosed flare, Air Treatment System, any Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other Equipment that is specifically referenced in any published Ministry document that outlines specific operational guidance that must be considered by the Director in issuing an Approval;
24. "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
25. "Exhausted" means the capacity of the activated carbon to adsorb contaminant emissions is reached and the activated carbon unit is not longer able to effectively reduce emissions;
26. "Facility" means the entire operation located on the property where the Equipment is located;
27. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
28. "Independent Acoustical Consultant" means an Acoustical Consultant not representing the Company, and not involved in the noise impact assessment or the design/implementation of Noise Control Measures for the Facility/Equipment. The Independent Acoustical Consultant shall not be retained by the consultant involved in the noise/vibration impact assessment or the design/implementation of noise/vibration control measures for the Facility/Equipment;
29. "Log" means a document that contains a record of each change that is required to be made to the ESDM Report and Acoustic Assessment Report, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a Point of Impingement and all changes to information associated with a Modification to the Facility that satisfies Condition 2;
30. "Malfunction" means any sudden, unplanned, infrequent and not reasonably preventable failure of the equipment associated with maintaining or monitoring negative pressure and/or negative air balance in the fully enclosed Organics Receiving Building, excluding failures that may be caused in part by poor maintenance or negligent operation;
31. "Manager" means the Manager, Technology Standards Section, Technical

Assessment and Standards Development Branch, or any other person who represents and carries out the duties of the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, as those duties relate to the conditions of this Approval;

32. "Minister" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the EPA under the Executive Council Act;
33. "Ministry" means the ministry of the Minister;
34. "Modification" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the Facility that may discharge or alter the rate or manner of discharge of a Compound of Concern to the air or discharge or alter noise or vibration emissions from the Facility;
35. "Noise Abatement Action Plan" means the noise abatement program developed by the Company, submitted to the Director and District Manager and approved by the Director, designed to achieve compliance with the sound level limits set in Publication NPC-300, as applicable;
36. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvers, enclosures, absorptive treatment, plenums and barriers. It also means the Noise Control Measures detailed in the Acoustic Assessment Report dated January 12, 2021 and signed by Michael Masschaele, GHD;
37. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution – Local Air Quality, made under the EPA;
38. "Odour Management Plan" means the document titled Odour Management Plan, dated May 19, 2021 and prepared by GHD Limited;
39. "Odour Monitoring Program" means a document or set of document which describe measures to detect and identify odour originating from the operation of the Facility;
40. "Organic Waste" has the same meaning as defined in the Waste Approval;
41. "Organics Receiving Building" means the enclosed building located at the Facility where the solid Organic Waste is to be received, pre-processed and temporarily stored;
42. "Original ESDM Report" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by Matthew Griffin, GHD Limited and dated January 21, 2020 submitted in support of the application, and includes any changes to the

report made up to the date of issuance of this Approval;

43. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
44. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
45. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
46. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
47. "Processes with Significant Environmental Aspects" means the Equipment which, during regular operation, would discharge one or more contaminants into the air in an amount which is not considered as negligible in accordance with section 26 (1) 4 of O. Reg. 419/05 and the Procedure Document;
48. "Professional Engineer" means a Professional Engineer as defined within the *Professional Engineers Act*, R.S.O. 1990, c.P.28;
49. "Publication NPC-103" means Publication NPC-103, Procedures, August 1978;
50. "Publication NPC-207" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the Ministry, August 1978, as amended;
51. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October 1995, as amended;
52. "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", August 2013, as amended;
53. "Revised Noise Abatement Action Plan" means the updated Noise Abatement Plan developed by the Company, submitted to the Director and District Manager and approved by the Director, designed to manage and achieve compliance with the sound level limits set in Publication NPC-300;
54. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
 - Schedule A - Supporting Documentation;
 - Schedule B - Biofilter and Bioscrubber Parameters;
 - Schedule C - Test Contaminants;
 - Schedule D - Source Testing Procedures;

- Schedule E - Procedure to Calculate and Record the 10-minute Average Concentration of Odour; and
- Schedule F - Continuous Temperature Monitoring and Recording System Requirements;

55. "Sensitive Receptor" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from odour discharges from the Facility, including one or a combination of:
- a. private residences or public facilities where people sleep (e.g.; single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.),
 - b. institutional facilities (e.g; schools, churches, community centres, day care centres, recreational centres, etc.),
 - c. outdoor public recreational areas (e.g.; trailer parks, play grounds, picnic areas, etc.), and
 - d. commercial areas where there are continuous public activities (e.g.; commercial plazas and office buildings);
56. "Source Testing" means site-specific sampling and testing to measure emissions resulting from operating the Air Treatment System under operating conditions that will derive an emission rate that, for the relevant averaging period of the contaminant, is at least as high as the maximum emission rate that the source of contaminant is reasonably capable of, or a rate approved by the Manager, within the approved operating range of the Air Treatment System which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
57. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
58. "Test Contaminants" means the contaminants listed in Schedule C;
59. "Toxicologist" means a qualified professional currently active in the field of risk assessment and toxicology that has a combination of formal university education, training and experience necessary to assess contaminants;
60. "Trained Personnel" means one or more Facility personnel trained in accordance with the requirements of the Waste Approval, including an employee trained or knowledgeable through instruction and/or practice and able to carry out any necessary duties related to the operation of the Equipment and procedures to be followed in the event of a process or an emergency situation;
61. "Trucks" means bulk solid waste truck(s), liquid waste truck(s) and residual/disposal and containerized wastes truck(s);

62. "Waste Approval" means the Environmental Compliance Approval and any Schedules attached to it, including the application and its supporting documentation for activities set out in section 27 of the EPA and carried out at the Facility; and
63. "Written Summary Form" means the electronic questionnaire form, available on the Ministry website, and supporting documentation, that documents the activities undertaken at the Facility in the previous calendar year.

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

TERMS AND CONDITIONS

1. GENERAL

1. Except as otherwise provided by this Approval, the Facility shall be designed, developed, built, operated and maintained in accordance with the terms and conditions of this Approval and in accordance with the following Schedules attached hereto:
 - Schedule A - Supporting Documentation
 - Schedule B - Biofilter and Bioscrubber Parameters
 - Schedule C - Test Contaminants
 - Schedule D - Source Testing Procedures
 - Schedule E - Procedure to Calculate and Record the 10-minute Average Concentration of Odour
 - Schedule F - Continuous Temperature Monitoring and Recording System Requirements

2. LIMITED OPERATIONAL FLEXIBILITY

1. Pursuant to section 20.6 (1) of the EPA and subject to Conditions 2.2 and 2.3 of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are Modifications to the Facility that:
 - a. are within the scope of the operations of the Facility as described in the Description Section of this Approval;
 - b. do not result in an increase of the Facility Production Limit above the level specified in the Description Section of this Approval; and

c. result in compliance with the performance limits as specified in Condition 4.

2. Condition 2.1 does not apply to,

a. the addition of any new Equipment with Specific Operational Limits or to the Modification of any existing Equipment with Specific Operational Limits at the Facility; and

b. Modifications to the Facility that would be subject to the Environmental Assessment Act.

3. Condition 2.1 of this Approval shall expire ten (10) years from the date of this Approval, unless this Approval is revoked prior to the expiry date. The Company may apply for renewal of Condition 2.1 of this Approval by including an ESDM Report and an Acoustic Assessment Report that describes the Facility as of the date of the renewal application.

3. REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION

1. Prior to making a Modification to the Facility that satisfies Condition 2.1.a. and 2.1.b., the Company shall prepare a proposed update to the ESDM Report to reflect the proposed Modification.

2. The Company shall request approval of an Acceptable Point of Impingement Concentration for a Compound of Concern if the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and a proposed update to an ESDM Report indicates that one of the following changes with respect to the concentration of the Compound of Concern may occur:

a. The Compound of Concern was not a Compound of Concern in the previous version of the ESDM Report and

i. the concentration of the Compound of Concern exceeds the concentration set out for the contaminant in the ACB list; or

ii. the Compound of Concern is not identified in the ACB list; or

b. The concentration of the Compound of Concern in the updated ESDM Report exceeds the higher of,

i. the most recent Acceptable Point of Impingement Concentration, and

ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.

3. The request required by Condition 3.2 shall propose a concentration for the

Compound of Concern and shall contain an assessment, performed by a Toxicologist, of the likelihood of the proposed concentration causing an adverse effect at Points of Impingement.

4. If the request required by Condition 3.2 is a result of a proposed Modification described in Condition 3.1, the Company shall submit the request, in writing, to the Director at least 30 days prior to commencing to make the Modification. The Director shall provide written confirmation of receipt of this request to the Company.
5. If a request is required to be made under Condition 3.2 in respect of a proposed Modification described in Condition 3.1, the Company shall not make the Modification mentioned in Condition 3.1 unless the request is approved in writing by the Director.
6. If the Director notifies the Company in writing that the Director does not approve the request, the Company shall,
 - a. revise and resubmit the request; or
 - b. notify the Director that it will not be making the Modification.
7. The re-submission mentioned in Condition 3.6 shall be deemed a new submission under Condition 3.2.
8. If the Director approves the request, the Company shall update the ESDM Report to reflect the Modification.
9. Condition 3 does not apply if Condition 2.1 has expired.

4. PERFORMANCE LIMITS

1. Subject to Condition 4.2, the Company shall not discharge or cause or permit the discharge of a Compound of Concern into the air if,
 - a. the Compound of Concern is identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the Benchmark 1 concentration; or
 - b. the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the higher of,
 - i. if an Acceptable Point of Impingement Concentration exists, the most recent Acceptable Point of Impingement Concentration, and
 - ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
2. Condition 4.1 does not apply if the benchmark set out in the ACB list has a

10-minute averaging period and no ambient monitor indicates an exceedance at a Point of Impingement where human activities regularly occur at a time when those activities regularly occur.

3. The Company shall operate any Equipment with Specific Operational Limits approved by this Approval in accordance with the Original ESDM Report and Conditions in this Approval.

5. NOISE

1. The Company shall:

- a. construct Facility, implement and operate the Equipment/Facility as outlined in the Acoustic Assessment Report dated January 12, 2021 and signed by Michael Masschaele, GHD;
- b. implement the Noise Control Measures as outlined in the Acoustic Assessment Report;
- c. ensure that, following construction completion and the installation and commissioning of Equipment and Noise Control Measures the noise emissions from the Facility/Equipment comply with the limits set out in Ministry Publication NPC-300;
- d. maintain no idling policy (with the exception of the waste trucks idling for the equivalent of no longer than 3 minutes per truck per weight scale visit), minimum queuing period and enforce an on-site maximum speed limit of 25 km/hr at the Facility property;
- e. ensure that any and all Trucks arrive at and depart from the Facility during the daytime hours only, from 7 a.m. to 7 p.m., in accordance to the table from Section 2 of the Acoustic Assessment Report and with the following:
 - i. limit Trucks arrivals and departures during the daytime hours from 7 a.m. to 7 p.m. on weekdays (Monday to Friday) in accordance with the following:
 - i. a maximum of four (4) bulk solid waste trucks per sixty (60) minute period;
 - ii. a maximum of two (2) residual/disposal and containerized wastes trucks per sixty (60) minute period; and
 - iii. a maximum of one (1) liquid waste truck per sixty (60) minute period;
 - ii. limit Trucks arrivals and departures during the daytime hours from 7 a.m. to 7 p.m. on Saturday in accordance with the following:

- i. a maximum of two (2) bulk solid waste trucks per sixty (60) minute period;
 - ii. a maximum of one (1) residual/disposal and containerized wastes trucks per sixty (60) minute period; and
 - iii. a maximum of one (1) liquid waste truck per sixty (60) minute period; and
 - iii. no Trucks on Sundays.
 - f. ensure that all overhead doors of Sludge Drying building, and the Organics Receiving Building, remain fully closed at all times, with the exception of Trucks entering and exiting or when Trucks delivering containerized waste have fully engaged with the loading dock seal; and
 - g. ensure that all Noise Control Measures are properly maintained and continue to provide the acoustical performance outlined in the Acoustic Assessment Report.
2. The Company shall ensure that the vibration emissions from the Facility comply with the limits set out in Ministry Publication NPC-207.

6. UPDATED ACOUSTIC ASSESSMENT REPORT

1. The Company shall submit, not later than twelve (12) months from the date of this Approval and prior start of construction, an updated Acoustic Assessment Report, to the District Manager and the Director, for approval by the Director. If required, the updated Acoustic Assessment Report shall incorporate a Revised Noise Abatement Action Plan including:
- a. a detailed description of the proposed Noise Control Measures, including individual acoustical performance specifications, such as octave band insertion and transmission losses and barrier dimensions, to reduce the noise emissions from the Facility to comply with the sound level limits set in Publication NPC-300; and
 - b. a detailed timetable for implementation of the Noise Control Measures.

7. BIOFILTER AND BIOSCRUBBER MONITORING

1. The Company shall monitor and record the physical parameters of the Biofilter and Bioscrubber as outlined in Schedule B.
2. The Company shall provide quarterly reports to the District Manger on the first of March, June, September and December of each year on the results of the monitoring required by Condition 7.1 including a comparison of monitored parameters to design levels.

8. SOURCE TESTING

1. The Company shall perform annual Source Testing in accordance with the procedure outlined in Schedule D of this Approval, to determine the rate of emission of the Test Contaminants from the Air Treatment System exhaust. The first Source Testing program shall be conducted within one (1) year of the date of this Approval or within six (6) months of the the first receipt of Organic Waste at the Facility, whichever comes later.

9. ENCLOSED FLARE

1. The Company shall operate the enclosed flare in such a manner that:
 - a. The temperature in the combustion chamber, is maintained at a minimum of 760 degrees Celsius at all times, when the enclosed flare is in operation; and
 - b. The residence time of the combustion gases in the combustion chamber of the enclosed flare shall not be less than 0.7 seconds at a temperature of 760 degrees Celsius.
2. The Company shall continuously monitor the temperature in the combustion chamber of the enclosed flare. The temperature monitor and recorder shall shall comply with the requirements outlined in Schedule F.

10. ODOUR CONTROL

1. The Company shall take measures to minimize odourous emissions from all potential sources at the Facility.
2. The Company shall ensure that:
 - a. the fully enclosed Organics Receiving Building is designed and constructed such that the potential for air leakages from the Organics Receiving Building is minimized;
 - b. at all times, the air from the fully enclosed Organics Receiving Building is collected and treated using the fully functional Air Treatment System;
 - c. all aspects of solid Organic Waste receiving and processing are undertaken in the fully enclosed Organics Receiving Building, as approved in this Approval;
 - d. the Organic Waste is processed in the approximate order of receipt;
 - e. all doors in the fully enclosed Organics Receiving Building are kept closed at all times, except during shipping and/or receiving, and for operational/maintenance access;
 - f. all bay doors in the fully enclosed Organics Receiving Building are fast acting doors design;

- g. the exterior bay doors are not opened at the same time as the interior door of the same receiving bay;

3. The Company shall ensure that:

- a. the fully enclosed Organics Receiving Building is maintained, at all times, under adequate negative pressure (rolling arithmetic average over 30 minute period) as compared to the ambient atmospheric pressure, excluding any time periods of Malfunction;
- b. the negative pressure and negative air balance for the enclosed Organics Receiving Building are monitored and recorded every five minutes (rolling arithmetic average over 30 minute period), utilizing negative pressure and negative air balance data every second;
- c. the fully enclosed Organics Receiving Building is equipped with negative pressure differential sensor(s) at a location(s) appropriate to avoid atmospheric interference;
- d. the opening and closing of the bay doors, the negative pressure differential sensor(s) and the ventilation systems are interlocked, monitored and controlled through the same SCADA control system to maintain adequate negative air balance and negative air pressure within the fully enclosed Organics Receiving Building;
- e. the fan blower associated with the ventilation system in the fully enclosed Organics Receiving Building is equipped with an alarm for loss of suction, which is integrated to the SCADA control system to indicate system failure and prompt the bay doors to remain in closed position;

4. If at any time, the Company cannot maintain adequate negative pressure as compared to the ambient atmospheric pressure (rolling arithmetic average over 30 minute period) and/or negative air balance (rolling arithmetic average over 30 minute period) within the fully enclosed Organics Receiving Building, then the Company shall:

- a. ensure that critical alarms are generated and promptly communicated to the Trained Personnel so that corrective action(s) can be undertaken;
- b. notify the District Manager within 24 hours of losing the negative pressure as compared to the ambient atmospheric pressure (rolling arithmetic average over 30 minute period) and/or negative air balance (rolling arithmetic average over 30 minute period), or within the period as directed or agreed to in writing by the District Manager; and
- c. prepare, retain a copy at the Facility and submit to the District Manager, a daily written report within one (1) week of losing the negative pressure

(rolling arithmetic average over 30 minute period) or negative air balance (rolling arithmetic average over 30 minute period), identifying all possible causes for losing the negative pressure (rolling arithmetic average over 30 minute period) or negative air balance (rolling arithmetic average over 30 minute period), actions taken to resolve the identified cause(s) and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents.

11. ODOUR MANAGEMENT PLAN

1. The Company shall implement the Odour Management Plan for the control of odour emissions resulting from the operation of the Facility. The Company shall update the Odour Management Plan as necessary or at the direction of the District Manager.

12. ODOUR MONITORING PROGRAM

1. The Company shall prepare and submit to the District Manager, not later than three (3) months prior to the receipt of Organic Waste at the Facility, an Odour Monitoring Program.
2. The Odour Monitoring Program shall be designed to detect and identify odour originating from the operation of the Facility.
3. The Odour Monitoring Program shall be implemented after written authorization from the District Manager has been received.
4. The Company shall obtain written authorization from the District Manager prior to the implementation of any changes to the Odour Monitoring Program.

13. VENTILATION ASSESSMENT

1. The Company shall develop a negative pressure assessment plan, prepared by a Professional Engineer, not later than five (5) months prior to receipt of any Organic Waste at the Facility, or as directed or agreed to in writing by the District Manager, for performing negative pressure assessment for the fully enclosed Organics Receiving Building and for identifying ideal methodology for achieving and monitoring negative pressure. The plan shall include as a minimum, but not limited to, the following:
 - a. drawings showing
 - i. layout of the Facility;
 - ii. identification of enclosures, if required; and
 - iii. proposed locations for the pressure monitoring sensors for each enclosure;

- b. details of the monitoring instruments;
 - c. identification of:
 - i. pressure monitoring sensor technology, numbers, location of negative pressure monitoring sensors within the fully enclosed Organics Receiving Building to avoid false positive readings;
 - ii. weather and other atmospheric impacts; and
 - iii. ideal target negative pressure and negative air balance for the fully enclosed Organics Receiving Building including the need to install any additional fans required to maintain target negative pressure and negative air balance within the fully enclosed Organics Receiving Building;
 - d. impacts of the bay doors operating practices, including a recommendation on appropriate face-velocity on doors and entranceways;
 - e. air changes in the Organics Receiving Building with a recommendation of minimum air exchanges;
 - f. instrument calibration schedule;
 - g. data collection, logging and reporting frequency;
 - h. alarm levels and triggers;
 - i. consideration of remedial actions if an alarm is triggered;
 - j. an evaluation of the negative pressure and air balance inside the fully enclosed Organics Receiving Building;
 - k. the monitoring period duration for the negative pressure assessment for the fully enclosed Organics Receiving Building;
 - l. frequency and methodology for performing the negative pressure assessment;
 - m. smoke test;
 - n. detailed evaluation of the SCADA control system associated with negative pressure ventilation, including adequacy and accuracy;
 - o. notification requirement to the District Manager; and
 - p. reporting on the negative pressure assessment, including an analysis of the results and recommendations.
2. The Company shall perform the negative pressure assessment for the fully enclosed Organics Receiving Building, not later than two (2) months prior to receipt of any Organic Waste at the Facility, or as directed or agreed to in

writing by the District Manager.

3. The Company shall submit a report, prepared by a Professional Engineer, on the negative pressure assessment for the fully enclosed Organics Receiving Building to the Director and the District Manager not later than one (1) month prior to receipt of any Organic Waste at the Facility. The report shall include but not be limited to:
 - a. an executive summary;
 - b. description of the building ventilation and negative pressure monitoring system;
 - c. results of the negative pressure assessment, including an indication of,
 - i. whether the ventilation system serving the Organics Receiving Building is capable of achieving and maintaining 1) at all times, adequate negative pressure (rolling arithmetic average over 30 minute period) as compared to the ambient atmospheric pressure, excluding any time periods of Malfunction, 2) at all times, adequate negative air balance (rolling arithmetic average over 30 minute period), excluding any time periods of Malfunction, 3) the appropriate face-velocity on doors and entranceways, and 4) the appropriate number of air changes per hour in the Organics Receiving Building;
 - ii. whether the negative pressure monitoring system follows ideal methodology for data collection, monitoring and reporting of the negative pressure within the Organics Receiving Building;
 - iii. whether any part of the negative pressure ventilation and monitoring system is inadequate for the purposes of odour containment within the Organics Receiving Building;
 - d. recommendations including the need to install any additional fans or ducting required to maintain the appropriate face-velocity on doors and entranceways, and to maintain the target air changes per hour in the Organics Receiving Building, as well as the target negative pressure and target negative air balance within the Organics Receiving Building;
4. The Company shall implement the recommendations identified in the negative pressure assessment report, prior to receipt of any Organic Waste at the Facility, or as directed or agreed to in writing by the District Manager.
5. If the District Manager is of the opinion that, the ventilation system, or part thereof, is not adequately maintaining negative pressure within the Organics Receiving Building, or the negative pressure assessment is not prepared in accordance with the negative pressure assessment plan required by this

Approval, then the District Manager may require re-assessment of the ventilation system.

14. DOCUMENTATION REQUIREMENTS

1. The Company shall maintain an up-to-date Log.
2. No later than March 31 in each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
3. The Company shall make the Emission Summary Table (see section 27 of O. Reg. 419/05) and Acoustic Assessment Summary Table available for examination by any person, without charge, by posting it on the Internet or by making it available during regular business hours at the Facility.
4. The Company shall, within three (3) months after the expiry of Condition 2.1 of this Approval, update the ESDM Report and the Acoustic Assessment Report such that the information in the reports is accurate as of the date that Condition 2.1 of this Approval expired.
5. Conditions 14.1 and 14.2 do not apply if Condition 2.1 has expired.

15. REPORTING REQUIREMENTS

1. Subject to Condition 15.2, the Company shall provide the Director no later than June 30 of each year, a Written Summary Form to be submitted through the Ministry's website that shall include the following:
 - a. a declaration of whether the Facility was in compliance with section 9 of the EPA, O. Reg. 419/05 and the conditions of this Approval;
 - b. a summary of each Modification satisfying Condition 2.1.a. and 2.1.b. that took place in the previous calendar year that resulted in a change in the previously calculated concentration at a Point of Impingement for any Compound of Concern or resulted in a change in the sound levels reported in the Acoustic Assessment Summary Table at any Point of Reception.
2. Condition 15.1 does not apply if Condition 2.1 has expired.

16. OPERATION AND MAINTENANCE

1. The Company shall prepare and implement, prior to the receipt of any Organic Waste at the Facility, operating procedures and maintenance programs for all Processes with Significant Environmental Aspects, which shall specify as a minimum:
 - a. frequency of inspections and scheduled preventative maintenance;

- b. frequency of monitoring of the parameters of the Biofilter and Bioscrubber and procedures to record the results of the monitoring;
 - c. a list of critical spare parts for the Air Treatment System and their storage location;
 - d. the frequency of inspection and replacement of the activated carbon in the activated carbon units;
 - e. procedures to prevent upset conditions;
 - f. procedures to minimize all fugitive emissions;
 - g. procedures to prevent and/or minimize odorous emissions;
 - h. procedures to prevent and/or minimize noise emissions; and
 - i. procedures for record keeping activities relating to the operation and maintenance programs.
2. The Company shall maintain, in the Facility, an inventory of critical spare parts for the Air Treatment System that can be installed in the event of failure.
 3. The Company shall ensure that the activated carbon in each activated carbon unit at the Facility is replaced before it is Exhausted.
 4. The Company shall ensure that all Processes with Significant Environmental Aspects are operated and maintained in accordance with this Approval, the operating procedures and maintenance programs.

17. COMPLAINTS RECORDING AND REPORTING

1. A designated representative for the Company shall be available to receive environmental complaints twenty-four (24) hours per day, seven (7) days per week. The telephone number for the designated representative for the Company shall be clearly posted at the entrance to the Facility.
2. If at any time, the Company receives an environmental complaint from the public regarding the operation of the Equipment approved by this Approval, the Company shall take the following steps:
 - a. Step 1: Receipt of Complaint - The Company shall record each complaint in a computerized tracking system. The information recorded shall include the following:
 - i. the name, address and the telephone number (or contact information) of the complainant, if known;
 - ii. the date and time of the complaint; and
 - iii. details of the complaint, including the description and duration of the incident.

- b. Step 2: Investigation of Complaint - After the complaint has been received by the Company and recorded in the tracking system, the Company shall, immediately notify, either the District Manager by phone during office hours or the Ministry's Spills Action Centre at 1-800-268-6060 after office hours. The Company shall immediately initiate investigation of the complaint. The investigation shall include, as a minimum, the following:
 - i. determination of the activities undertaken at the Facility at the time of the complaint;
 - ii. general meteorological conditions including, but not limited to the ambient temperature, approximate wind speed and its direction, sunny versus cloudy, inversion versus clear and windy, etc. at the time of the complaint;
 - iii. location of the person who submitted the complaint, if known, at the time of the incident; and
 - iv. determination if the complaint is attributed to activities being undertaken at the Facility and if so, determination of all the possible cause(s) of the complaint;
 - c. Step 3: Corrective Action - The Company shall determine the remedial action(s) to address the cause(s) of the complaint and implement the remedial action(s) to eliminate the cause(s) of the complaint, as soon as practicably possible, and to prevent a similar occurrence in the future.
 - d. Step 4: Written Response - The Company shall forward a formal reply to the complainant, if known and to the District Manager within one (1) week after the receipt of the complaint. The response shall include the results of the investigation of the complaint, the action(s) taken or planned to be taken to address the cause(s) of the complaint, and if follow-up response would be provided.
 - e. Step 5: Recording - All of the information collected and actions taken must be recorded in the tracking system.
3. If the District Manager deems the remedial measures taken as per Condition 17.2(c) to be unsuitable, insufficient or ineffective, the District Manager may direct the Company, in writing, pursuant to the remedial order section (s.17) or the preventative measures order section (s.18) of the EPA to take further measures to address the noted failure, upset or malfunction, including but not limited to the following:
- a. reduction in the receipt of the waste;

- b. cessation of the receipt of the waste;
- c. removal and off-site disposal of waste; and
- d. repairs or modifications to the equipment or processes at the Facility, that may include the following actions:
 - i. the Company may prohibit use of specific doors under some circumstances or atmospheric conditions;
 - ii. the Company may increase the magnitude of the negative pressure to be maintained in the Organics Receiving Building;
 - iii. the Company may increase the number of air exchanges in the areas suspected of causing fugitive odour emissions escaping from the Organics Receiving Building; and
 - iv. the Company may retrofit the design of the ventilation system within the Organics Receiving Building to provide a more effective local capture of the odours from the odour sources within the Organics Receiving Building; and
- e. further investigation of possible sources of fugitive air emissions from the Facility as follows:
 - i. the Company shall develop a plan, prepared by a Professional Engineer, for assessment of other possible sources of fugitive air emissions originating from the Organic Waste received and processed at the Facility;
 - ii. the Company shall conduct the assessment of other possible sources of fugitive air emissions, as directed or agreed by the District Manager as per the plan prepared in accordance with Condition 17.3(e)(i) of this Approval;
 - iii. the Company shall prepare and submit a report prepared by a Professional Engineer on the assessment of other possible sources of fugitive air emissions to the Director and the District Manager within two (2) months after completing the assessment of other possible sources of fugitive air emissions; and
 - iv. implement the recommendations identified in the assessment of other possible sources of fugitive air emissions report within two (2) months after completing the assessment of other possible sources of fugitive air emissions or as directed or agreed by the District Manager.

18. RECORD KEEPING REQUIREMENTS

1. Any information requested by any employee in or agent of the Ministry concerning the Facility and its operation under this Approval, including, but not limited to, any records required to be kept by this Approval, shall be provided to the employee in or agent of the Ministry, upon request, in a timely manner.
2. Unless otherwise specified in this Approval, the Company shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this Approval, including,
 - a. a copy of the Original ESDM Report and each updated version;
 - b. a copy of each version of the Acoustic Assessment Report;
 - c. supporting information used in the emission rate calculations performed in the ESDM Reports and Acoustic Assessment Reports;
 - d. the records in the Log;
 - e. copies of each Written Summary Form provided to the Ministry under Condition 15.1 of this Approval;
 - f. all records produced by Source Testing;
 - g. all records produced by the continuous temperature monitoring system;
 - h. a copy of the Odour Management Plan;
 - i. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects; and
 - j. all records related to environmental complaints made by the public as required by Condition 17 of this Approval.

19. REVOCATION OF PREVIOUS APPROVALS

1. This Approval replaces and revokes all Certificates of Approval (Air) issued under section 9 EPA and Environmental Compliance Approvals issued under Part II.1 EPA to the Facility in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

20. ACOUSTIC AUDIT

1. The Company shall carry out Acoustic Audit measurements on the actual noise emissions due to the operation of the Facility. The Company:
 - a. shall carry out Acoustic Audit measurements in accordance with the procedures in Publication NPC-103;
 - b. shall submit an Acoustic Audit Report on the results of the Acoustic Audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Publication NPC-233, to the District Manager

and the Director, not later than four (4) months after full construction completion and commencement of the Equipment operation at the Facility.

2. The Director

- a. may not accept the results of the Acoustic Audit if the requirements of Publication NPC-233 were not followed; and
- b. may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

SCHEDULE A

Supporting Documentation

1. Environmental Compliance Approval Application, dated January 21, 2020, signed by Richard Weldon, Director and submitted by the Company;
2. Emission Summary and Dispersion Modelling Report, prepared by Matthew Griffin, GHD Limited and dated January 21, 2020;
3. Acoustic Assessment Reports, prepared by Michael Masschaele, GHD Limited and dated January 31, 2020, August 14, 2020, October 23, 2020, December 21, 2020 and January 12, 2021;
4. Additional information provided by Matthew Griffin, GHD Limited in letters dated August 14, 2020, September 25, 2020, December 22, 2020, March 12, 2021, May 21, 2021; and
5. Additional information provided by Matthew Griffin, GHD Limited in emails dated June 18, 2021, July 7, 2021, July 23, 2021 and July 30, 2021.
6. Additional information provided by Michael Masschaele, GHD Limited in emails dated July 16, 2020, August 14, 2020, September 30, 2020, October 16, 2020, October 23, 2020, December 22, 2020, January 13, 2021 and January 15, 2021; and
7. Additional information provided by Joel Mickelson, General Counsel, Romspen Investment Corporation in a letter dated October 16, 2020.

SCHEDULE B

Biofilter and Bioscrubber Parameters

The Company shall monitor and record the operating parameters of the Biofilter and Bioscrubber, through a combination of sensors, meters, physical probes or equivalent

means, as recommended by the supplier of the Biofilter and Bioscrubber. In the development of the monitoring program for the Biofilter and Bioscrubber, the following physical parameters and monitoring frequency shall be considered:

1. pressure drop across the Biofilter and Bioscrubber beds (kilopascals), daily to weekly;
2. process air flow through the Biofilter and Bioscrubber (cubic metres per second), daily;
3. Biofilter bed and Bioscrubber bed moisture (percent), weekly;
4. Biofilter bed and Bioscrubber bed temperature (degrees Celcius), hourly to daily;
5. inlet air temperature after the pre-humidification chamber (degrees Celsius), hourly to daily;
6. inlet air relative humidity after the pre-humidification chamber (percent), daily
7. pH of water runoff from Biofilter bed and Bioscrubber bed, monthly; and
8. water flow in the pre-humidification chamber and the media irrigation system, daily.

SCHEDULE C

Test Contaminants

1. Odour
2. Total Reduced Sulphur Compounds

SCHEDULE D

Source Testing Procedures

1. The Company shall submit, not later than three (3) months prior to the Source Testing, to the Manager a Pre-Test Plan for the Source Testing required under this Approval. The Company shall finalize the Pre-Test Plan in consultation with the Manager.
2. The Company shall not commence the Source Testing required under this Approval until the Manager has approved the Pre-Test Plan.
3. The Company shall complete the Source Testing not later than three (3) months after the Manager has approved the Pre-Test Plan, or within a period agreed to or directed by the Manager.
4. The Company shall notify the Manager, the District Manager and the Director in

writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to the Source Testing.

5. The Company shall submit a report (electronic format) on the Source Testing to the Manager, the District Manager and the Director not later than three (3) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
 1. an executive summary;
 2. an identification of the applicable North American Industry Classification System code (NAICS) for the Facility;
 3. records of weather conditions such as ambient temperature and relative humidity, wind speed and direction, and any environmental complaints if received, at the time of the Source Testing;
 4. records of operating conditions at the time of Source Testing, including but not limited to the following:
 - a. production data and equipment operating rate as a percentage of maximum capacity;
 - b. Facility/process information related to the operation of the Air Treatment System;
 - c. description of the emission sources controlled by the Air Treatment System at the time of testing;
 5. results of Source Testing, including the emission rate, emission concentration, and relevant emission factor of the Test Contaminants from the Air Treatment System;
 6. a tabular comparison of calculated emission rates and emission factors based on Source Testing results for the Test Contaminants to relevant estimates described in the ESDM Report, and
 7. the results of dispersion calculations, taking into account all odour sources at the Facility, using the average of the results of the Source Testing, to indicate the maximum 10-minute concentration of odour at the Point of Impingement and the most impacted Sensitive Receptor computed in accordance with Schedule E.

6. The Director may not accept the results of the Source Testing if:
 1. the Source Testing Code or the requirement of the Manager were not followed;
 2. the Company did not notify the Manager, the District Manager and Director of the Source Testing; or
 3. the Company failed to provide a complete report on the Source Testing.
7. If the Director does not accept the result of the Source Testing, the Director may require re-testing. If re-testing is required, the Pre-Test Plan strategies need to be revised and submitted to the Manager for approval. The actions taken to minimize the possibility of the Source Testing results not being accepted by the Director must be noted in the revision.
8. The Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 and the Procedure Document with the results from the Source Testing if any of the calculated emission factors or calculated emission rates are higher than the predicted rates in the ESDM Report, not later than three (3) months after the submission of the Source Testing report and make these records available for review by staff of the Ministry upon request.

SCHEDULE E

Procedure to Calculate and Record the 10-minute Average Concentration of Odour

1. Calculate and record one-hour average concentration of odour at the Point of Impingement and at the most impacted Sensitive Receptor, employing the AERMOD atmospheric dispersion model or any other model acceptable to the Director, that employs at least five (5) years of hourly local meteorological data and that can provide results reported as individual one-hour average odour concentrations;
2. Convert and record each of the one-hour average concentrations predicted over the five (5) years of hourly local meteorological data at the Point of Impingement and at the most impacted Sensitive Receptor to 10-minute average concentrations using the One-hour Average to 10-Minute Average Conversion described below; and
3. Record and present the 10-Minute Average concentrations predicted to occur over a five (5) year period at the Point of Impingement and at the most impacted Sensitive Receptor in a histogram. The histogram shall identify all predicted 10-

minute average odour concentration occurrences in terms of frequency, identifying the number of occurrences over the entire range of predicted odour concentration in increments of not more than 1/10 of one odour unit. The maximum 10-minute average concentration of odour at the Sensitive Receptor will be considered to be the maximum odour concentration at the most impacted Sensitive Receptor that occurs and is represented in the histogram, disregarding outlying data points on the histogram as agreed to by the Director.

4. Use the following formula to convert and record one-hour average concentrations at the Point of Impingement and at the most impacted Sensitive Receptor to 10-minute average concentrations:

$$X_{10\text{min}} = X_{60\text{min}} * 1.65$$

where $X_{10\text{min}}$ = 10-minute average concentration

$X_{60\text{min}}$ = one-hour average concentration

(Equation: X Subscript 10min Baseline equals X Subscript 60min Baseline times 1.65, where X Subscript 10min Baseline equals 10-minute average concentration and X Subscript 60min Baseline equals one-hour average concentration.)

SCHEDULE F

Continuous Temperature Monitoring and Recording System Requirements

PARAMETER: Temperature

LOCATION:

The sample point for the continuous temperature monitoring and recording system shall be located at a location where the measurements are representative of the minimum temperature of the gases leaving the combustion chamber of the enclosed flare.

PERFORMANCE:

The continuous temperature monitoring and recording system shall meet the following minimum performance specifications for the following parameters:

Type: shielded "K" type thermocouple, or equivalent

Accuracy: ±1.5 percent of the minimum gas temperature

DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitoring system without a significant loss of accuracy and with a time resolution of one (1) minute or better.

RELIABILITY:

The monitoring system shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.

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

1. GENERAL

Condition No. 1 is included to require the Approval holder to build, operate and maintain the Facility in accordance with the Supporting Documentation in Schedule A considered by the Director in issuing this Approval.

2. LIMITED OPERATIONAL FLEXIBILITY, REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION AND PERFORMANCE LIMITS

Conditions No. 2, 3 and 4 are included to limit and define the Modifications permitted by this Approval, and to set out the circumstances in which the Company shall request approval of an Acceptable Point of Impingement Concentration prior to making Modifications. The holder of the Approval is approved for operational flexibility for the Facility that is consistent with the description of the operations included with the application up to the Facility Production Limit. In return for the operational flexibility, the Approval places performance based limits that cannot be exceeded under the terms of this Approval. Approval holders will still have to obtain other relevant approvals required to operate the Facility, including requirements under other environmental legislation such as the Environmental Assessment Act.

3. NOISE

Condition 5 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.

4. UPDATED ACOUSTIC ASSESSMENT REPORT

Condition 6 is included to require the Company to submit an updated Acoustic Assessment Report incorporating a Revised Noise Abatement Action Plan to reduce the noise emissions from the Facility to comply with the applicable limits set in the Ministry's Noise Guidelines.

5. BIOFILTER AND BIOSCRUBBER MONITORING AND SOURCE TESTING

Conditions 7 and 8 are included to require the Company to gather accurate

information so that compliance with the operating requirements of this Approval can be verified.

6. ENCLOSED FLARE

Condition No. 9 is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the Regulations and this Approval and to gather accurate information so that compliance with the operating requirements of this Approval can be verified.

7. ODOUR CONTROL

Condition 10 is included to require the Company to properly operate and maintain the Facility/Equipment to minimize impact to the environment.

8. ODOUR MANAGEMENT PLAN

Condition No. 11 is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the Regulations and this Approval.

9. ODOUR MONITORING PROGRAM AND VENTILATION ASSESSMENT

Conditions No. 12 and 13 are included to require the Company to gather accurate information so that compliance with the EPA, the Regulations and this Approval can be verified and to prevent an adverse effect resulting from the operation of the Facility.

10. DOCUMENTATION REQUIREMENTS

Condition No. 14 is included to require the Company to maintain ongoing documentation that demonstrates compliance with the performance limits as specified in Condition 4 of this Approval and allows the Ministry to monitor ongoing compliance with these performance limits. The Company is required to have an up to date ESDM Report and Acoustic Assessment Report that describe the Facility at all times and make the Emission Summary Table and Acoustic Assessment Summary Table from these reports available to the public on an ongoing basis in order to maintain public communication with regard to the emissions from the Facility.

11. REPORTING REQUIREMENTS

Condition No. 15 is included to require the Company to provide a yearly Written Summary Form to the Ministry, to assist the Ministry with the review of the site's compliance with the EPA, the Regulations and this Approval.

12. OPERATION AND MAINTENANCE

Condition No. 16 is included to require the Company to properly operate and maintain the Processes with Significant Environmental Aspects to minimize the impact to the environment from these processes.

13. COMPLAINTS RECORDING AND REPORTING PROCEDURE

Condition No. 17 is included to require the Company to respond to any

environmental complaints regarding the operation of the Equipment, according to a procedure that includes methods for preventing recurrence of similar incidents and a requirement to prepare and retain a written report.

14. RECORD KEEPING REQUIREMENTS

Condition No. 18 is included to require the Company to retain all documentation related to this Approval and provide access to employees in or agents of the Ministry, upon request, so that the Ministry can determine if a more detailed review of compliance with the performance limits as specified in Condition 4 of this Approval is necessary.

15. REVOCATION OF PREVIOUS APPROVALS

Condition No. 19 is included to identify that this Approval replaces all Section 9 Certificate(s) of Approval and Part II.1 Approvals in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

16. ACOUSTIC AUDIT

Condition 20.1 is included to require the Company to gather accurate information so that the environmental impact and subsequent compliance with the EPA, the Regulations and this Approval can be verified.

Condition 20.2 is included to ensure that the Acoustic Audit is carried out in accordance with procedures set in the Ministry's Noise Guidelines.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8-3157-94-006 issued on July 21, 1994

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. 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 Secretary* Environmental Review Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5	AND	The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3	AND	The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5
--------------------------------------------------------------------------------------------------------------	-----	------------------------------------------------------------------------------------------------------------------------	-----	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <https://ero.ontario.ca/>, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 27th day of October,
2021

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

KS/
c: District Manager, MECP York-Durham
Matthew Griffin, GHD



AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 6526-BZVPHT
Issue Date: October 27, 2021

RIC (1515 Thornton) Inc.
162 Cumberland St, No. 300
Toronto, Ontario
M5R 3N5

Site Location: Evergreen Oshawa Anaerobic Digestion Facility
1515 Thornton Rd N Part of Lot 16, Concession 4
Oshawa City, Regional Municipality of Durham, Ontario

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

a 6.3-hectare waste disposal site (processing/transfer) to,

- receive, temporarily store and process up-to a maximum of 200,000 tonnes of the Organic Waste per year;
- generate up-to a maximum of approximately 25,064,765 normalized cubic metres of the Biogas per year; and
- generate up-to a maximum of approximately 175,533 tonnes of the Digestate per year; or
- receive and process/transfer up-to a maximum of 160,368 tonnes per year of the non-Organic Waste per year.

Waste disposal site (processing/transfer) comprises the Anaerobic Digestion Facility or the Transfer Facility.

Anaerobic Digestion Facility for receipt and processing of the Organic Waste is composed of the following:

Organics Receiving Building comprising the following processes, working areas and equipment:

- Bulk Waste Receiving Area consisting of up-to seven (7) receiving bays within an air-lock area (double-door system) and including a wheel wash area;

- two (2) Bulk Waste Storage Areas;
- one (1) Receiving Bunker and one (1) heavy contamination container;
- one (1) Containerized Waste Receiving Area consisting of one (1) loading dock, one (1) Containerized Waste Receiving Bunker, an enclosed belt conveyor to transfer the Containerized Organic Waste to Waste Processing Bunker, one (1) empty tote storage area, one (1) tote washing area and one (1) clean tote storage area, one (1) pellet storage, one (1) cart washing and one (1) cart storage area;
- Bulk Waste enclosed belt conveyors to transfer the Organic Waste from Bulk Waste Storage Areas to Bulk Waste Processing Bunkers;
- Bulk Waste Processing Area consisting of three (3) processing lines. Each processing line consists of conveyors, and one (1) pulper or one (1) de-packaging machine;
- three (3) additional processing lines in the Bulk Waste Processing Area. Each processing line consists of conveyors, and one (1) pulper or one (1) de-packaging machine;
- the following optional equipment in each processing line constructed in the Bulk Waste Processing Area: one (1) hydrocyclone and one (1) air separator;
- Residual Waste Storage Area consisting of three (3) plastic/grit residual waste storage trailers;
- the following optional equipment for processing of the Residual Waste prior to loading for off-site disposal constructed in in the Bulk Waste Processing Area: two (2) drum screens, two (2) ferrous/non-ferrous separator and two (2) size reduction equipment system
- four (4) Digestate/Waste Activated Sludge de-watering systems each system consisting of centrifuges, belt presses, filter presses or screw presses, and discharging the de-watered Digestate/Waste Activated Sludge cake to the Pasteurization Screw Conveyor System and the centrate into one (1) approximately 2 m³ Centrate Tank;
- one (1) Pasteurization Screw Conveyor System to pasteurize de-watered Digestate/Waste Activated Sludge cake, and discharging the cake into the Digestate/Waste Activated Sludge Cake Trailers;
- one (1)-30 m³ Water Reuse Buffer Tank;
- one (1) steam boiler;
- ventilation system, that maintains cascading negative air pressure in the Organics Receiving Building and collects the odourous air from the source extraction points that include as a minimum the following sources:
 - headspace of the liquid Organic Waste Tanks;
 - solid Organic Waste pre-processing areas;
 - Digestate cake de-watering equipment;
 - pasteurization screw conveyor;
 - pre-treatment of liquid Organic Waste;
- Struvite Reactor to remove phosphate and nitrogen as struvite for mixing with the Digestate cake for disposal or further processing;
- Pre-Treatment Area for pre-treatment of liquid IC&I Organic Waste using a screen and/or a centrifuge;

Wastewater Treatment Enclosure comprising the following processes, working areas and equipment:

- blowers for the Wastewater Treatment aeration system; and
- dissolved air flotation system for final clarification of the effluent destined to be re-used at the

Site or discharged to the sanitary sewer;

Tank Farm comprising the following processes, working areas and vessels:

- one (1)-500 m³ FOG Tank;
- one (1)-100 m³ Quarantine Liquid IC&I Waste Tank;
- two (2)-500 m³, each, Liquid IC&I Waste Tanks;
- Liquid Digestate Pasteurization System consisting of up to three (3), maximum 75 m³ tanks to heat liquid digestate to 70 degrees Celsius for one hour;
- one (1)-500 m³ pasteurized Liquid Digestate Storage Tank;
- three (3)-750 m³, each, Digester Feed Tanks;
- four (4)-6,000 m³, each, Digesters;
- one (1)-8,000 m³ Digestate/Biogas Storage/Buffer Tank;
- one (1)-6,000 m³ Wastewater Treatment Tank, containing a two-stage aerobic Wastewater Treatment System for treatment of liquid output from IC&I Organic Waste pre-treatment, centrate from Digestate de-watering encompassing the following:
 - a Stage 1 single reactor system for High activity Ammonium Removal Over Nitrite (SHARON) system to pre-treat the ammonium rich decantate of the anaerobic Digestion de-watering process; and
 - an activated sludge system, with de-nitrification and nitrification processes to treat Digestate decantate coming from Stage 1 and to provide biological treatment for other influent streams, including liquid waste;

Biofilter Enclosure comprising the following processes, working areas and equipment:

- one (1) downflow biofilter, filled with synthetic, engineered media and equipped with a spraying system;
- one (1) active carbon filter to provide pre-treatment of odourous air from the ventilation system source extraction points, as a backup to the bioscrubber, to be located in Organics Receiving Building or in the Biofilter Enclosure;
- one (1) bio-scrubber, using activated sludge from the Wastewater Treatment System to pre-treat odourous air by removing hydrogen sulphide and to provide humidity control for the air entering the biofilter to be located in the Organics Receiving Building or the Biofilter Enclosure;

Biogas Upgrading System comprising the following processes, working areas and equipment:

- two (2) Biogas Pre-Treatment System consisting of a biological scrubber or chemical (sodium hydroxide) scrubber and activated charcoal system;
- two (2) Biogas Upgrading System, used to produce renewable natural gas from Biogas, using pressure swing adsorption, water scrubber, or membrane technology;

Biogas Flare comprising the following equipment:

- one (1) enclosed Biogas Flare, operating as a standby Biogas combustion control device during periods when the Biogas cleaning and upgrading system is down or when Biogas generation exceeds the capacity of the Biogas cleaning and upgrading system or when Biogas generation from the Digestate/Biogas Buffer Tank requires flaring;

Dryer Building comprising the following processes, working areas and equipment:

- one (1) disc dryer or an equivalent dryer, to dry the de-watered and pasteurized digestate cake, with indirect steam heating, discharging the dried digestate cake, onto an enclosed conveyor system to be conveyed to the Organics Receiving Building for loading into trailers for shipment off-site or to the optional Pelletizer System, equipped with one (1) cyclone discharging the odourous air into the Air Treatment System;
- one (1) cyclone followed by one (1) condenser for the dryer exhaust discharging the odourous air into the Air Treatment System and the condensate into the Wastewater Treatment System;
- one (1) steam boiler;
- one (1)-40,000 m³/hr ventilation system roof fan;
- one (1) ammonia scrubber within a spill containment area with dimensions 2.5 m by 2.5 m, discharging the air into the air treatment system and the spent scrubbing medium into the ammonium sulphate tank;
- one (1)-30 m³ double-walled polyethylene sulphuric acid storage tank for use in the ammonia scrubber;
- one (1)-50 m³ double-walled polyethylene ammonium sulphate storage tank;

and to be used for processing of the following types of waste generated in the Province of Ontario:

- solid non-hazardous Organic Waste, and
- liquid non-hazardous Organic Waste;

all derived from plants or animals, listed in Condition 3.1(2) of this Approval, from residential (domestic), industrial, commercial and institutional sources and all readily biodegradable.

Transfer Facility for receipt, temporary storage, processing and/or transfer of the solid non-hazardous non-Organic Waste is composed of the following processes:

- manual sorting of the Recyclable Waste into dedicated roll-off containers;
- baling of the Recyclable Waste limited to fibers, plastics, metals and textiles; and
- transfer of the solid non-Organic Waste for Final Disposal, for further processing at an approved waste disposal site or for re-use;

and to be used for processing/transfer of the following types of waste generated in the Province of Ontario:

- solid non-hazardous non-Organic Waste destined for Final Disposal; and
- Recyclable Waste limited to paper fibers, plastics, metals, glass, textiles, porcelain, and drywall destined for further processing or beneficial reuse and/or use in re-manufacturing sector.

from residential (domestic), industrial, commercial and institutional sources.

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

"**Adverse Effect**" as defined in the EPA;

"**Air Approval**" means the Environmental Compliance Approval and any Schedules attached to it, including the application and its supporting documentation for activities set out in section 9 of the EPA and carried out at the Site; and

"**Air Treatment System**" means the air pollution control approved under the Air Approval;

"**Anaerobic Digester**" means the Anaerobic Digester(s) used for anaerobic digestion of the approved Organic Waste and as defined in Regulation 347;

"**Anaerobic Digestion Output**" means any solid or liquid material that results from the treatment of the approved Organic Waste in the Anaerobic Digesters;

"**Approval**" means this Environmental Compliance Approval and any Schedules to it, including the application and supporting documentation listed in Schedule "A"

"**Biogas**" means the gaseous waste generated from microbial biodegradation of the approved Organic Waste and the Waste Activated Sludge conducted under anaerobic conditions and has the physical attributes and the chemical composition, in particular the methane and carbon dioxide content, of a gas considered to be a biogas by the biogas industry;

"**bar**" is a unit of pressure;

"**Biogas Flare**" means the Biogas combustion equipment and any associated equipment described in the Owner's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval and the Air Approval;

"**Biogas Upgrading System**" means the Biogas upgrader and any associated gas treatment equipment described in the Owner's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval and the Air Approval;

"**Blue Box Waste**" has the same meaning as in O. Regulation 101/94;

"**CFIA**" means the Canadian Food Inspection Agency;

"**Change Log**" means a section in the Design and Operations Report for the Site that contains a record of each Modification that is required to be made to the Design and Operations Report, including the date on which the Modification occurred;

"**Clean-Out Material**" means the Residual Waste removed from the Digester due to floating or settling of the material and that has been recovered as part of maintenance of the Digester;

"**Commencement of Phase 1a**" means completion of commissioning of Phase 1a;

"**Digestate**" is a processed organic waste as defined in Regulation 347 and within the context of this Approval it means the output from the Digestate/Biogas Buffer Tank. Digestate may be a liquid or a solid, prior to and/or following the pasteurization, de-watering, drying and/or pelletization;

"**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 appropriate local district office of the Ministry where the Site is geographically located or such other official of the Ministry as may be assigned the duties of the District Manager;

"**EASR**" means the Environmental Activity and Sector Registry;

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

"**Equipment**" means the equipment described in the Owner's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;

"**Equivalent Equipment**" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;

"**Final Disposal**" within the context of this Approval means land disposal and thermal treatment, both as defined in Regulation 347, and does not include handling, storing, transferring, treating or processing of waste at a land disposal or a thermal treatment site;

"**Fertilizer**" means any substance or mixture of substances, containing nitrogen, phosphorus, potassium or other plant food, that is manufactured, sold or represented for use as a plant nutrient, as defined in the Fertilizers Act;

"**Fertilizers Act**" means the *Fertilizers Act*, R.S., 1985, c-F-10, as amended;

"**Financial Assurance**" is as defined in Section 131 of the EPA;

"**FOG**" means fats, oils and greases;

"**Foreign Matter**" within the context of this Approval means materials that include but are not limited to glass, metallic objects, plastic and other foreign objects that are not typically considered naturally occurring;

"**Human Body Waste**" means waste derived from or containing wastes from the human body, limited to used diapers, used incontinence products and used sanitary products collected through the municipal source separated waste collection programs;

"**IC&I**" means industrial, commercial and institutional;

"**Malfunction**" means any sudden, unplanned, infrequent and not reasonably preventable failure of the equipment associated with maintaining or monitoring negative pressure and/or negative air balance in the Organics Receiving Building, excluding failures that may be caused in part by poor maintenance or negligent operation or failure of the equipment associated with any Organic Waste processing/treatment resulting in non-compliance with the requirements of this Approval;

"**Manual**" means a document or a set of documents that provide written instructions to staff of the Owner;

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

"**mL**" means millilitre(s);

"**Modification**" means any pre-approved construction, alteration, extension or replacement of any structure, equipment, apparatus, mechanism, thing, or alteration of a process rate at the Site within the approved Operating Envelope for the Site;

"**m²**" means square metre(s);

"**m³**" means cubic metre(s);

"**NASM**" means non-agricultural source materials as defined in and within the meaning of O. Regulation 267/03;

"**NMA**" means the *Nutrient Management Act*, 2002, S.O. 2002, c. 4, as amended;

"**non-Organic Waste**" means solid non-hazardous non-organic waste that is not derived from plants or animals, is not biodegradable and is not suitable for microbial biodegradation. Non-Organic Waste means a municipal waste as defined in Regulation 347;

"**Operating Envelope**" means implementation of the Modifications during Phases 1b, 1c, 1d and Phase 2;

"**Operational Flexibility**" means implementation of the Modifications within the pre-approved Operating Envelope for the Site;

"**O. Regulation 267/03**" means Ontario Regulation 267/03, General, made under the NMA, as amended;

"**Off-Farm Anaerobic Digestion Materials**" is as defined in O. Regulation 267/03 and Regulation 347, and within the context of this Approval it means the Organic Waste destined for the Anaerobic Digester(s) at the Site;

"**Operator**" means any person, other than the Owner's employees, authorized by the Owner as having the charge, management or control of any aspect of the Site and includes Evergreen Environmental Inc., its successors or assigns;

"**Organic Waste**" means solid and liquid non-hazardous organic waste derived from plants or animals, readily biodegradable and suitable for microbial biodegradation conducted under anaerobic conditions, and as further described in Condition 3.1 of this Approval. Solid Organic Waste means a municipal waste as defined in Regulation 347. Liquid Organic Waste means a liquid waste as defined in Regulation 347;

"**Organics Receiving Building**" means the enclosed building located at the Site where the solid Organic Waste is to be received, pre-processed and temporarily stored prior to transfer to the Digester Feed Tanks;

"**Owner**" means RIC (1515 Thornton) Inc. that is responsible for the establishment and operation of the Site being approved by this Approval, any contractors that work on behalf of the Owner and includes any successors and assigns;

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

"**PA**" means the *Pesticides Act*, R.S.O. 1990, c.P. 11, as amended;

"**Phase 1**" means the initial phase of the Site development as approved under this Approval;

"**Phase 2**" means the final phase of the Site development as part of the Operational Flexibility approved under this Approval;

"**Primary Sludge**" means the solid Organic Waste generated in the pre-treatment step of the Wastewater Treatment System;

"**Processed Organic Waste**" is as defined as defined in Regulation 347;

"**Professional Engineer**" means a Professional Engineer as defined within the *Professional Engineers Act*, R.S.O. 1990, c. P.28, as amended;

"**Provincial Officer**" means any person designated in writing by the Minister as a provincial officer pursuant to Section 5 of the OWRA or Section 5 of the EPA or Section 17 of the PA or Section 4 of the NMA or Section 8 of the SDWA;

"**Resource Recovery and Circular Economy Act**" means the *Resource Recovery and Circular Economy Act*, 2016, S.O. 2016, c. 12, Sched. 1, as amended;

"**Regulation 347**" means Regulation 347, R.R.O. 1990, General - Waste Management, made under the EPA, as amended;

"Rejected Waste" means the incoming load inadvertently received at the Site and deemed by the Owner to be waste that does not meet the incoming Waste quality criteria set out in this Approval or that cannot be processed;

"Residual Waste" means waste resulting from waste management activities at the Site and destined for further management at an off-Site location or Final Disposal. Residual Waste includes the Clean-Out Material;

"Renewable Natural Gas" means the Biogas upgraded in the Biogas Upgrading System and destined for injection into natural gas distribution infrastructure;

"Recyclable Waste" within the context of this Approval, means one of the following:

- a. a dedicated load of Blue Box Waste and/or Waste set out in Schedule 2 to O. Regulation 101/94 and/or any other Waste which has been source-separated for the purposes of resource recovery and diversion from Final Disposal to beneficial uses to meet a realistic market demand; or
- b. a material that is a resource recovered from collected products and packaging or from other sources, for designated materials that have resource recovery targets prescribed in regulations under the Resource Recovery Circular Economy Act and that is managed in accordance with such regulations, once an applicable regulation is enacted for the purpose of regulating a particular resource;

Recyclable Waste excludes residues generated in Ontario from waste management activities for recovery of materials for beneficial reuse and/or use in re-manufacturing sector and which cannot be diverted from Final Disposal;

"Sampling and Analysis Protocol" means the document entitled "Sampling and Analysis Protocol for Ontario Regulation 267/03 made under the *Nutrient Management Act, 2002*", prepared by the Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment, Conservation and Parks and dated July 1, 2021;

"SDWA" means the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, as amended;

"Sensitive Receptor" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from odour discharges from the Site, including one or a combination of:

- a. commercial areas where there are continuous human activities (e.g.: commercial plazas and office buildings);
- b. institutional facilities (e.g.: schools, churches, community centres, day care centres, recreational centres, etc.),
- c. outdoor public recreational areas (e.g.: trailer parks, play grounds, picnic areas, etc.), and
- d. private residences or public facilities where people sleep (e.g.: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.);

"**Site**" means the waste disposal site referred to as Evergreen Oshawa Anaerobic Digestion Facility located at 1515 Thornton Rd N Part of Lot 16, Concession 4 in the City of Oshawa, Regional Municipality of Durham, Ontario and as shown in the supporting documentation listed in the attached Schedule "A";

"**Waste Limits**" means the Waste processing and the Waste generation limits placed by the Director in this Approval;

"**Slump Test**" means the Test Method for the Determination of Liquid Waste set out in Schedule 9 of Regulation 347;

"**Spill**" is as defined in the EPA;

"**SSO**" means the source separated Organic Waste which consists of the Organic Waste suitable for anaerobic digestion, which has been separated at its source of origin by the generator of the waste and including the bags used by the generator to encase the Organic Waste at the source of generation;

"**Trained Personnel**" means one or more Site personnel trained in accordance with the requirements of Condition 11.2. including an employee trained or knowledgeable through instruction and/or practice and able to carry out any necessary duties related to management of the Waste as approved in this Approval.

"**Trucks**" means the reagent truck(s), solid Organic Waste truck(s), liquid Organic Waste truck(s) and Residual Waste/Rejected Waste truck(s);

"**waste**" within the context of this Approval, it means any material defined as a waste or designated to be a waste under any Ontario regulation or any other discarded, unwanted, unsuitable for its original use or purpose (for example off-specification or expired) post-consumer goods, items or materials. Any outputs from processing/treatment of waste continue to be considered waste;

"**Waste**" means the waste approved for receipt at the Site and waste in-process;

"**WAS**" means Waste Activated Sludge; and

"**°C**" means degrees Celsius.

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

TERMS AND CONDITIONS

1.0 GENERAL

1.1 Compliance

- (1) The Owner shall ensure compliance with all the conditions of this Approval and shall ensure that any person authorized to carry out work on or operate any aspect of the Site 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) Any person authorized to carry out work on or operate any aspect of the Site shall comply with the conditions of this Approval.

1.2 Build, etc. in Accordance and Operational Flexibility

Waste Limits

- (1) This Approval is for the following Organic Waste Limit for Phase 1:
 - i. receipt and processing of up to 140,000 tonnes of the Organic Waste per year;
 - ii. generation of up-to approximately 2,000 normalized cubic metres per hour or 13,016,930 normalized cubic metres of Biogas per year; and
 - iii. generation of up-to approximately 93,583 tonnes of Digestate per year.

Essential Construction and Equipment

- (2) This Approval is for the Site construction and installation of the following essential equipment required in Phase 1a:
 - a. construction, installation and operation of the following processes, working areas and equipment in the Organics Receiving Building:
 - i. Bulk Waste Receiving Area consisting of four (4) receiving bays within an air-lock area (double-door system) and including a wheel wash area;
 - ii. Bulk Waste Storage Area and Receiving Bunker and one (1) heavy contamination container;
 - iii. Bulk Waste enclosed belt conveyors to transfer the Organic Waste from Bulk Waste Storage Area to Bulk Waste Processing Bunkers;
 - iv. Bulk Waste Processing Area consisting of three (3) processing lines. Each processing line consists of conveyors, and one (1) pulper or one (1) de-packaging machine;
 - v. Residual Waste Storage Area consisting of two (2) plastic/grit Residual Waste storage trailers;
 - vi. two (2) Digestate/Waste Activated Sludge de-watering systems each system consisting of centrifuges, belt presses, filter presses or screw presses, and discharging the de-watered Digestate/Waste Activated Sludge cake to the Pasteurization Screw Conveyor System and the centrate into one (1) approximately 2 m³ Centrate Tank;
 - vii. one (1) Pasteurization Screw Conveyor System to pasteurize de-watered Digestate/Waste Activated Sludge cake, and discharging the cake into three (3) Digestate/Waste Activated Sludge Cake Trailers;
 - viii. one (1)-30 m³ Water Reuse Buffer Tank;

- ix. one (1) steam boiler;
 - x. Ventilation system, that maintains cascading negative air pressure in the Organics Receiving Building and collects the odourous air from the source extraction points that include as a minimum the following sources:
 - A. headspace of the liquid Organic Waste Tanks;
 - B. solid Organic Waste pre-processing areas;
 - C. Digestate cake de-watering equipment;
 - D. pasteurization screw conveyor;
 - E. pre-treatment of liquid Organic Waste;
 - xi. Liquid Digestate Pasteurization System consisting of up to three (3), maximum 75 m³ tanks to heat liquid digestate to 70°C for one hour;
- b. construction, installation and operation of the following processes, working areas and equipment in the Wastewater Treatment Enclosure:
- i. blowers for the Wastewater Treatment aeration system; and
 - ii. dissolved air flotation system for final clarification of the effluent destined to be re-used at the Site or discharged to the sanitary sewer;
- c. construction, installation and operation of the following vessels in the Tank Farm:
- i. one (1)-500 m³ FOG Tank;
 - ii. one (1)-100 m³ Quarantine Liquid IC&I Waste Tank;
 - iii. one (1)-500 m³, Liquid IC&I Waste Tanks;
 - iv. one (1)-500 m³ pasteurized Liquid Digestate Storage Tank;
 - v. two (2)-750 m³, each, Digester Feed Tanks;
 - vi. two (2)-6,000 m³, each, Digesters;
 - vii. one (1)-8,000 m³ Digestate/Biogas Storage/Buffer Tank;
 - viii. one (1)-6,000 m³ Wastewater Treatment Tank, containing a two-stage aerobic Wastewater Treatment System for treatment of liquid output from IC&I Organic Waste pre-treatment, centrate from Digestate de-watering encompassing the following:
 - A. A Stage 1 single reactor system for High activity Ammonium Removal Over Nitrite (SHARON) system to pre-treat the ammonium rich decantate of the Anaerobic Digestion de-watering process; and
 - B. An activated sludge system, with de-nitrification and nitrification processes to treat Digestate decantate coming from Stage 1 and to provide biological treatment for other influent streams, including liquid Waste;
- d. construction, installation and operation of the following processes, working areas and equipment in the Biofilter Enclosure;
- i. one (1) downflow biofilter, filled with synthetic, engineered media and equipped with a spraying system;
 - ii. one (1) active carbon filter to provide pre-treatment of odourous air from the ventilation

system source extraction points, as a backup to the bioscrubber, to be located in Organics Receiving Building or the Biofilter Enclosure;

iii. one (1) bio-scrubber, using activated sludge from the Wastewater Treatment System to pre-treat odourous air by removing hydrogen sulphide and to provide humidity control for the air entering the biofilter to be located in the Organics Receiving Building of the Biofilter Enclosure;

e. construction, installation and operation of the following processes, working areas and equipment in the Biogas Upgrading System:

i. one (1) Biogas Pre-Treatment System consisting of a biological scrubber or chemical (sodium hydroxide) scrubber and activated charcoal system;

ii. one (1) Biogas Upgrading System, used to produce renewable natural gas from Biogas, using pressure swing adsorption, water scrubber, or membrane technology; and

iii. a spill containment area for any necessary reagent storage and processing vessels that contain liquids;

f. construction, installation and operation of the following processes, working areas and equipment in the Biogas Flare:

i. one (1) enclosed Biogas Flare, operating as a standby Biogas combustion control device during periods when the Biogas cleaning and upgrading system is down or when Biogas generation exceeds the capacity of the Biogas cleaning and upgrading system or when Biogas generation from the Digestate/Biogas Buffer Tank requires flaring;

g. operation of the Digesters under the mesophilic or thermophilic conditions.

(3) The Site shall be constructed and the approved essential equipment shall be installed and must commence operation, as set out in Conditions 1.2(1) and 1.2(2), within five (5) years of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the Site not in operation. In the event that the construction, installation and/or operation of any portion of the Site is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).

(4) Within thirty (30) calendar days of commencement of construction, the Owner shall prepare and submit to the District Manager a schedule for the completion of construction and commissioning operation of the Site. The Owner shall notify the District Manager within thirty (30) days of the commissioning operation of any the Site. Upon completion of construction of the Site as set out in Conditions 1.2(1) and 1.2(2), the Owner shall prepare and submit a statement to the District Manager, certified by a Professional Engineer, that the Site is constructed in accordance with this Approval.

Operational Flexibility

(4) The following Modifications under Phases 1b, Phase 1c, Phase 1d, and Phase 2 are approved in

this Approval for the purpose of defining the Operating Envelope, including the Waste Limits for the Site:

- a. Waste Limits for Phase 2:
 - i. receipt and processing of up-to 200,000 tonnes of the Organic Waste per year;
 - ii. generation of up-to approximately 4,000 normalized cubic metres per hour or 25,064,765 normalized cubic metres of Biogas per year;
 - iii. generation of up-to a maximum of approximately 175,533 tonnes of Digestate per year in Phase 2.

- b. For Phase 1b:
 - i. construction, installation and operation of the following processes, working areas and equipment in the Organics Receiving Building:
 - A. up-to three (3) additional receiving bays within an air-lock area (double-door system);
 - B. three (3) additional processing lines in the Bulk Waste Processing Area. Each processing line consists of conveyors, and one (1) pulper or one (1) de-packaging machine;
 - C. one (1) additional plastic/grit Residual Waste storage trailers in the Residual Waste Storage Area;
 - D. one (1) Additional Digestate/Waste Activated Sludge Cake Trailers; and
 - E. Pre-Treatment Area for pre-treatment of liquid IC&I Organic Waste using a screen and/or a centrifuge;

- c. For Phase 1c:
 - i. construction, installation and operation of the following vessels in the Tank Farm:
 - A. one (1)-500 m³, each, Liquid IC&I Waste Tanks;
 - B. one (1)-750 m³, each, Digester Feed Tanks; and
 - C. two (2)-6,000 m³, each, Digesters;

- d. For Phase 1d:
 - i. construction, installation and operation of the following optional processes, working areas and equipment in the Organics Receiving Building:
 - A. the following optional equipment in each processing line constructed in the Bulk Waste Processing Area: one (1) hydrocyclone and one (1) air separator;
 - B. the following optional equipment for processing of the Residual Waste prior to loading for off-site disposal constructed in in the Bulk Waste Processing Area: two (2) drum screens, two (2) ferrous/non-ferrous separator and two (2) size reduction equipment system
 - C. Containerized Waste Receiving Area consisting of one (1) loading dock, one (1) Containerized Waste Receiving Bunker, an enclosed belt conveyor to transfer the Containerized Organic Waste to Low/High Contamination Waste Processing Bunker, one (1) empty tote storage area, one (1) tote washing area and one (1) clean tote storage area, one (1) pellet storage, one (1) cart washing and one (1) cart storage area; and
 - D. Struvite Reactor to remove phosphate and nitrogen as struvite for mixing with the

- Digestate cake for disposal or further processing;
- ii. construction, installation and operation of the following processes, working areas and equipment in the optional Dryer Building:
 - A. one (1) disc dryer or an equivalent dryer, to dry the de-watered and pasteurized digestate cake, with indirect steam heating, discharging the dried digestate cake, onto an enclosed conveyor system to be conveyed to the Organics Receiving Building for loading into trailers for shipment off-site or to the optional Pelleterizer System, equipped with one (1) cyclone discharging the odourous air into the Air Treatment System;
 - B. one (1) cyclone followed by one (1) condenser for the dryer exhaust discharging the odourous air into the Air Treatment System and the condensate into the Wastewater Treatment System;
 - C. one (1) steam boiler; and
 - D. one (1)-40,000 m³/hr ventilation system roof fan;
 - iii. construction, installation and operation of the following processes, working areas and equipment in the Air Treatment System in the Dryer Building:
 - A. one (1): ammonia scrubber within a spill containment area with dimensions 2.5 m by 2.5 m, discharging the air into the air treatment system and the spent scrubbing medium into the ammonium sulphate tank;
 - B. one (1)-30 m³ double-walled polyethylene sulphuric acid storage tank for use in the ammonia scrubber;
 - C. one (1)-50 m³ double-walled polyethylene ammonium sulphate storage tank; and
 - D. Items above are required to be constructed and operating prior to operation of the drying system in the Dryer Building;
 - e. For Phase 2:
 - i. construction, installation and operation of the following processes, working areas and equipment in the Organics Receiving Building:
 - A. all equipment listed in Phase 1b;
 - B. two (2) additional Digestate/Waste Activated Sludge de-watering systems, each system consisting of centrifuges, belt presses, filter presses or screw presses, and discharging the de-watered Digestate/Waste Activated Sludge cake to the Pasteurization Screw Conveyor System (installed in Phase 1a) and the centrate into the Centrate Tank (installed in Phase 1a);
 - ii. construction, installation and operation of the following vessels in the Tank Farm:
 - A. all equipment listed in Phase 1c;
 - iii. construction, installation and operation of the following processes, working areas and equipment in the Biogas Upgrading System:
 - A. one (1) additional Biogas Pre-Treatment System consisting of a biological scrubber or chemical (sodium hydroxide) scrubber and activated charcoal;
 - B. one (1) additional Biogas Upgrading System, used to produce renewable natural gas

from Biogas, using pressure swing adsorption, water scrubber, or membrane technology;

f. operation of the Digesters under the mesophilic or thermophilic conditions.

- (5) Pursuant to section 20.6 (1) of the EPA and subject to Conditions 1.2(6) and 1.2(7) of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are the Modifications that:
 - a. are within the scope of the approved Operating Envelope for the Site as described in Condition 1.2(4) of this Approval;
 - b. do not result in an increase of the Waste Limits above the levels specified in Condition 1.2(4) of this Approval; and
 - c. result in compliance with the compliance criteria as specified in this Approval.
- (6) Condition 1.2(5) of this Approval shall expire ten (10) years from the date of this Approval. The Owner may apply for renewal of Condition 1.2(5) of this Approval by including a Design and Operations Report that describes the Site as of the date of the renewal application.
- (7) Within sixty (60) calendar days from this Approval, the Owner shall revise the Design and Operations Report to include the required declarations from a Professional Engineer and the Owner and a Change Log section for the purpose of tracking implementation of the Modifications.
- (8) The revised Design and Operations Report shall be retained on-Site prior to the first scheduled Modification implementation date.
- (9) Prior to making a Modification to the Site, the Owner shall prepare an update to the Design and Operations Report to add the required technical information on the proposed Modification and to track the Modification through the update in the Change Log section. All supporting information including technical memorandum, engineering plans and specifications, as applicable and appropriate to support the declarations that the Modification conforms with the approved Operating Envelope shall remain on-Site for future inspections.

1.3 As-built Drawings

- (1) A set of as-built drawings, certified by a Professional Engineer and showing the design of the Site, shall be kept at the Site at all times.

1.4 Interpretation

- (1) Where there is a conflict between a provision of any document, including the application referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take

precedence.

- (2) Where there is a conflict between the application and a provision in any documents listed in Schedule "A", the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and that the Ministry approved the amendment.
- (3) Where there is a conflict between any two documents listed in Schedule "A", other than the application, the document bearing the most recent date shall take precedence.
- (4) 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.

1.5 Other Legal Obligations

- (1) 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; or
 - b. limit in any way the authority of the Ministry to require certain steps be taken or to require the Owner to furnish any further information related to compliance with this Approval.
- (2) Despite an Owner or any other person fulfilling any obligations imposed by this Approval, the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the Adverse Effect or impairment of water quality.

1.6 Adverse Effect

- (1) The Site shall be constructed, operated and maintained in a manner which ensures the health and safety of all persons and prevents generation of negative environmental impacts including but not limited to dust, odours, vectors, pests, birds, litter, vibration, noise and any other negative environmental effects that may cause an Adverse Effect.
- (2) If at any time dust, including dust from vehicles leaving the Site, odours, vectors, pests, birds, litter, vibration, noise or other such negative environmental effects are generated at the Site and cause an Adverse Effect, the Owner shall take immediate and appropriate remedial action(s) that is/are necessary to alleviate the Adverse Effect, including suspension of all waste management activities and removal of waste from the Site, if necessary.
- (3) The Owner shall take steps to minimize and ameliorate any Adverse Effect on the natural environment or impairment of water quality resulting from the approved operations at the Site, including such steps as accelerated or additional monitoring as may be necessary to determine the

nature and extent of the effect or impairment.

1.7 Change of Owner and Operator

- (1) The Owner shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any change in:
 - a. the ownership of the Site;
 - b. the operator of the Site;
 - c. the address of the Owner;
 - d. the 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. B.17, as amended, shall be included in the notification; or
 - e. the name of the corporation where the Owner is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the *Corporations Information Act*, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.
- (2) The Owner shall notify the District Manager, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of the Operator; and
 - b. change of the Operator, including address of the new Operator.
- (3) No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance. In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

1.8 Inspections by the Ministry

- (1) No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, the PA, the SDWA or the NMA of any place to which this Approval relates, and without limiting the foregoing:
 - a. to enter upon the premises where the approved processing is undertaken, or the location where the records required by the conditions of this Approval are kept;
 - b. to have access to, inspect, and copy any records required to be kept by the conditions of this

Approval;

- c. to inspect the Site, related Equipment and appurtenances;
- d. to inspect the practices, procedures, or operations required by the conditions of this Approval;
- e. to conduct interviews with staff, contractors, agents and assignees of the Owner; and
- f. to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the EPA, the OWRA, the PA, the SDWA or the NMA.

1.9 Information and Record Retention

- (1) Any information requested by the Ministry, concerning the operation of the Site and its operation under this Approval, including but not limited to any records required to be kept by this Approval shall, upon request, be provided to the Ministry in a timely manner and in a format specified by the Ministry. All records shall be retained for five (5) years except as otherwise authorized in writing by the Director.
- (2) The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this Approval or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:
 - a. an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Approval or any statute, regulation or other legal requirement; or
 - b. acceptance by the Ministry of the information's completeness or accuracy.
- (3) The Owner shall ensure that a copy of this Approval, in its entirety and including all its Notices of Amendment, and the documentation listed in Schedule "A", are retained at the Owner's office at all times.

1.10 Financial Assurance

- (1) The Owner shall maintain the Financial Assurance, as defined in Section 131 of the EPA, in the amount of CAN\$87,582.00. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Transfer Facility clean-up and disposal of all approved quantities of waste at the Transfer Facility, at any one time.
- (2) Prior to August 31, 2023 or sixty (60) days prior to the first receipt of Organic Waste at the Site, whichever comes first, the Owner shall submit to the Director, the Financial Assurance, as defined in Section 131 of the EPA in the amount of CAN\$2,126,570.00. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Site clean-up and disposal of all approved quantities of waste during the essential

development of the Site, at any one time.

- (3) A minimum of sixty (60) days prior to receipt of the amount of the Organic Waste approved for Phase 2, the Owner shall submit to the Director, the Financial Assurance, as defined in Section 131 of the EPA in the amount of CAN\$2,996,039.00. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Site clean-up and disposal of all approved quantities of waste during the Phase 2 operation of the Site, at any one time.
- (4) Commencing on November 30, 2025 and at intervals of three (3) years thereafter, the Owner shall submit to the Director, a re-evaluation of the amount of Financial Assurance to implement the actions required under Conditions 1.10.(1) through 1.10.(3). The re-evaluation shall include an assessment based on any new information relating to the environmental conditions of the Site and shall include the costs of additional monitoring and/or implementation of contingency plans required by the Director upon review of the closure plan and annual reports. The Financial Assurance must be submitted to the Director within thirty (30) calendar days of written acceptance of the re-evaluation by the Director.
- (5) Commencing on November 30, 2022, the Owner shall prepare and maintain at the Site an updated re-evaluation of the amount of Financial Assurance required to implement the actions required under Conditions 1.10.(1) through 1.10.(3) for each of the intervening years in which a re-evaluation is not required to be submitted to the Director under Condition 1.10.(4). The re-evaluation shall be made available to the Ministry staff, upon request.
- (6) The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion. If any Financial Assurance is scheduled to expire or notice is received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial Assurance at least sixty (60) days before the Financial Assurance terminates, the Financial Assurance shall forthwith be replaced by cash.

1.11 Certificate of Requirement

- (1) Prior to dealing with the property in any way, the Owner shall provide a copy of this Approval and any amendments, to any person who will acquire an interest in the property as a result of the dealing.
- (2) Within ninety (90) calendar days from the date of issuance of this Approval, the Owner shall submit to the Director a completed Certificate of Requirement which shall include:
 - a. a plan of survey prepared, signed and sealed by an Ontario Land Surveyor, which shows the area of the Site where waste has been or is to be deposited at the Site or is or has been affecting the soil or the surface water or the groundwater at the Site;
 - b. proof of ownership of the Site;
 - c. a letter signed by a member of the Law Society of Upper Canada or other qualified legal practitioner acceptable to the Director, verifying the legal description provided in the

Certificate of Requirement; and

- d. the legal abstract of the property; and any supporting documents including a registerable description of the Site.

(3) Within thirty (30) calendar days of receiving a Certificate of Requirement authorized by the Director, the Owner shall:

- a. register the Certificate of Requirement in the appropriate Land Registry Office on the title to the property; and
- b. submit to the Director written verification that the Certificate of Requirement has been registered on title.

2.0 SIGNS and SITE SECURITY

2.1 Signs

(1) The Owner shall ensure that a sign is posted at the entrance to the Site, readable from the nearest public roadway bordering the Site. The following information shall be included on the sign:

- a. name of the Owner and the Operator;
- b. this Approval number;
- c. normal hours of operation;
- d. Owner's telephone number to which complaints may be directed;
- e. Ministry's telephone numbers to which complaints may be directed;
- f. Owner's twenty-four hour emergency telephone number (if different from above);
- g. a warning against unauthorized access; and
- h. a warning against dumping at the Site.

(2) The Owner shall install and maintain appropriate and visible signs at the Site to direct vehicles to the Waste, including the Organic Waste, receiving areas and the Digestate and the Residual Waste removal areas.

(3) The Owner shall post appropriate and visible signs along the traffic route providing clear directions to the Site and to all Waste drop-off areas clearly identifying the acceptable Waste types and other appropriate instructions.

2.2 Site Security

(1) The Owner shall ensure that all Waste processing, loading, unloading and transfer to or from vehicles or containers at the Site are supervised at all times by Trained Personnel.

(2) The Owner shall ensure the Site is operated in a safe and secure manner, and that all Waste is properly handled, contained or stored so as not to pose any threat to the general public and the Site personnel.

- (3) The Owner shall ensure that access to the Site is regulated and that the Site is secured to restrict access only to authorized personnel.
- (4) The Owner shall ensure that all Site entrances and buildings are gated and locked to restrict access only to authorized personnel when the Site is not open.

3.0 SERVICE AREA, APPROVED WASTE TYPES and RATES

3.1 Service Area and Approved Waste Types

- (1) The Owner shall only accept the approved Waste generated in the Province of Ontario.

Anaerobic Digestion Facility

- (2) At the Anaerobic Digestion Facility, the Owner is approved to receive the following Waste types:

- a. Organic Waste from the following IC&I sources:

- i. bakeries;
- ii. confectionary processing facilities;
- iii. dairies and facilities that process dairy products;
- iv. fruit and vegetable processing facilities;
- v. cereal and grain processing facilities;
- vi. oil seed processing facilities;
- vii. snack food processing facilities;
- viii. snack food manufacturing facilities;
- ix. breweries and distillers grain;
- x. wineries;
- xi. beverage manufacturing facilities;
- xii. food processing facilities;
- xiii. grocery stores;
- xiv. food distribution companies;
- xv. milling facilities;
- xvi. fruit and vegetable packing facilities;
- xvii. pet food manufacturing;
- xviii. production of ethanol or biodiesel; and
- xix. any other source allowed in writing by the District Manager.

- b. SSO from the residential (domestic) curbside collection programs operated by a municipality or on behalf of a municipality and that may contain soiled diapers, soiled incontinence products, soiled sanitary products and pet wastes; and
- c. SSO from the institutional generators including airports, hospitals, long-term homes and schools.

Transfer Facility

- (3) At the Transfer Facility, the Owner is approved to receive the following Waste types:
- a. solid non-hazardous non-Organic Waste from IC&I and residential (domestic) sources destined for Final Disposal; and
 - b. Recyclable Waste limited to paper fibers, plastics, metals, glass, textiles, porcelain, and drywall.

3.2 Prohibited Waste Types

- (1) The Site is not approved to receive the following waste types:
- a. any waste that is classified as hazardous waste in accordance with Regulation 347;
 - b. any non-hazardous animal carcasses, including deadstock as defined in O. Regulation 105/09: Disposal of Deadstock under the *Food Safety and Quality Act*, 2001, S.O. 2001, c.20;
 - c. any waste that is classified as "Specified Risk Materials" which has the same meaning as in section 6.1 of the *Health of Animals Regulations* (C.R.C., c. 296), made under the *Health of Animals Act* (S.C. 1990, c. 21), as amended;
 - d. any untreated septage as defined in O.Regulation 267/03 or hauled sewage as defined in Regulation 347;
 - e. any sewage sludge, which within the context of this Approval means the organic materials resulting from treatment of sewage up-to the anaerobic digestion processing step at sewage works, where the sewage works is subject to the requirements under the OWRA and,
 - i. means any works for the collection, transmission, treatment and disposal of sewage or any part of such works, but does not include plumbing to which the *Building Code Act*, 1992 applies; and
 - ii. is owned by a municipality;
 - iii. is owned by the Crown or the Ontario Clean Water Agency, subject to an agreement with a municipality under the OWRA; or
 - iv. receives only waste similar in character to the residential (domestic) sewage from a household;
 - f. any biosolids, which within the context of this Approval mean the organic materials resulting from treatment of sewage, including the anaerobic digestion processing step at sewage works;
 - g. dedicated loads of soiled diapers, soiled incontinence products, soiled sanitary products and pet waste from the IC&I sources;
 - h. any liquid IC&I waste that does not meet the definition of the Organic Waste;

- i. any SSO that contains or is suspected of containing plant or animal products or by-products taken from aircraft, passengers and/or crew of the aircraft arriving in Ontario; and
- j. any SSO that contains or is suspected of containing plant or animal products or by-products taken from a vessel, passengers and/or crew of vessels arriving in Ontario.

(2) No putrescible waste shall be received at the Transfer Facility.

3.3 Waste Receipt Rates

Anaerobic Digestion Facility

(1) At the Anaerobic Digestion Facility, the Owner is approved to receive the Organic Waste in quantities that are not to exceed:

a. for Phase 1:

i. the following maximum daily amounts of the Organic Waste:

- A. 367 tonnes per day of the bulk solid Organic Waste, that includes the SSO;
- B. 105 tonnes per day of the Containerized Organic Waste in totes, bins, carts or pallets;
- C. 105 tonnes per day of the liquid IC&I Organic Waste; and
- D. 65 tonnes per day of the FOG;

ii. a maximum of 140,000 tonnes of the Organic Waste annually, consisting of the following Waste type approximate amounts that may vary up-to plus or minus 20 per cent (%):

- A. 50,000 to 95,000 tonnes per year of the bulk solid Organic Waste and the bulk Organic Waste, that includes the SSO;
- B. up-to 24,000 tonnes per year of the Containerized IC&I Organic Waste in totes, bins, carts or pallets;
- C. 10,000 to 20,000 tonnes per year of the liquid IC&I Organic Waste; and
- D. up-to 6,000 tonnes per year of the FOG;

b. for Phase 2:

i. the following maximum daily amounts of the Organic Waste:

- A. 729 tonnes per day of the bulk Organic Waste;
- B. 150 tonnes per day of the Containerized Organic Waste in totes, bins, carts or pallets;
- C. 105 tonnes per day of the liquid IC&I Organic Waste; and
- D. 65 tonnes per day of the FOG;

ii. a maximum of 200,000 tonnes of the Organic Waste annually, consisting of the following

Waste type approximate amounts:

- A. 95,000 to 180,000 tonnes per year of the bulk solid Organic Waste and the bulk Organic Waste, that includes SSO;
- B. up-to 48,000 tonnes per year of the Containerized IC&I Organic Waste in totes, bins, carts or pallets;
- C. 20,000 to 40,000 tonnes per year of the liquid IC&I Organic Waste; and
- D. up-to 12,000 tonnes per year of the FOG.

Transfer Facility

- (2) Prior to Commencement of Phase 1a, at the Transfer Facility, the Owner is approved to receive the solid non-hazardous non-Organic Waste in quantities that are not to exceed,
 - a. a maximum of 57,200 tonnes per year of the solid non-hazardous non-Organic Waste limited to the following:
 - i. solid non-hazardous non-Organic Waste, from IC&I and residential (domestic) sources and destined for transfer for Final Disposal; and
 - ii. Recyclable Waste limited to paper, plastic, metal and glass products and packages, textiles, porcelain, and drywall for manual sorting at the Transfer Facility into separated waste categories.
- (3) After Commencement of Phase 1a, the Transfer Facility shall stop receiving the approved non-Organic Waste and shall be shut down and decommissioned.

4.0. SITE OPERATIONS

4.1 Operating Hours

- (1) The Owner shall ensure that the Waste and the chemical reagents are received and shipped from the Site only between the hours of,
 - a. Monday to Friday: 7:00 a.m. to 7:00 p.m.
 - b. Saturday: 7:00 a.m. to 2:00 p.m.
- (2) The Owner is approved to undertake Waste processing/management activities at the Site twenty-four (24) hours per day, seven (7) days per week.

4.2 Incoming Waste Receipt

Anaerobic Digestion Facility

- (1) The Owner shall inspect all incoming Organic Waste loads and the accompanying Waste

characterization documentation to ensure that only the Waste that is approved under this Approval is received at the Site.

- (2) The incoming Organic Waste that has not been characterized in accordance with this Approval or that is not accompanied by the required documentation shall not be accepted at the Site and shall immediately be directed off-Site.
- (3) The Owner shall establish and implement a Waste screening and tracking system for all Organic Waste received, processed, stored at and transferred from the Site.
- (4) Upon arriving at the Site, the Organic Waste shall be forthwith unloaded within the confines of the Organics Receiving Building.
- (5) All sorting of the incoming solid Organic Waste at the Site shall be undertaken indoors, within the confines of the Organics Receiving Building.
- (6) The Owner shall ensure that all incoming Organic Waste that is received at the Site and handled in accordance with this Approval, is used as the feedstock in the Digesters.

Transfer Facility

- (7) The Owner shall inspect the accompanying Waste characterization documentation for all incoming Municipal Waste loads to ensure that only Waste that is approved under this Approval is received at the Transfer Facility.
- (8) Where possible, the Owner shall visually inspect all incoming Municipal Waste loads prior to unloading to confirm that only Waste that is approved under this Approval is accepted at the Transfer Facility.
- (9) Upon unloading of the incoming Municipal Waste, the Owner shall visually inspect all incoming Municipal Waste for acceptability at the Transfer Facility.

4.3 Rejected Waste Handling

Anaerobic Digestion Facility

- (1) In the event that a load of solid waste that does not meet the quality criteria from this Approval is inadvertently accepted in the Organics Receiving Building, the Owner shall ensure that this Rejected Waste:
 - a. is handled and removed from the Site in accordance with Regulation 347 and the EPA;
 - b. is separated from the solid Organic Waste approved for receipt;
 - c. is stored within the confines of the Organics Receiving Building at all times; and
 - d. is removed from the Site within forty eight (48) hours of its receipt or as acceptable to the

District Manager.

- (2) In the event that a load of liquid waste that does not meet the quality criteria from this Approval is inadvertently accepted at the Site and is mixed with the approved Organic Waste in a Liquid Tank, the content of the Liquid Tank shall be considered the Rejected Waste and the Owner shall ensure that this Rejected Waste is handled and removed from the Site in accordance with the contingency measures as required in Condition 12.0 of this Approval.
- (3) Despite provisions of Condition 4.3(2), the liquid Rejected Waste shall be removed from the Site in accordance with Regulation 347 and the EPA.
- (4) In the event of the receipt of the Rejected Waste, a record shall be made in the daily log book or in an electronic file of the reason why the waste is being refused and of the origin of the waste.
- (5) District Manager shall be notified in writing of the receipt of the Rejected Waste within three (3) business days.
- (6) The following information shall be included in the notification to the District Manager:
 - a. quantity and type of the waste;
 - b. source of the waste;
 - c. reason why the waste was refused;
 - d. final destination of the Rejected Waste, if known; and
 - e. time and date of receipt and time and date of removal from the Site.

Transfer Facility

- (7) In the event that a load of solid waste that does not meet the quality criteria from this Approval is inadvertently accepted in the Transfer Facility Building, the Owner shall ensure that this Rejected Waste:
 - a. is handled and removed from the Site in accordance with Regulation 347 and the EPA;
 - b. is separated from the Municipal Waste approved for receipt;
 - c. is stored within the confines of the Transfer Facility Building at all times; and
 - d. is removed from the Site within forty eight (48) hours of its receipt or as acceptable to the District Manager.
- (8) In the event of the receipt of the Rejected Waste, a record shall be made in the daily log book or in an electronic file of the reason why the waste is being refused and of the origin of the waste.
- (9) District Manager shall be notified in writing of the receipt of the Rejected Waste within three (3) business days.
- (10) The following information shall be included in the notification to the District Manager:

- a. quantity and type of the waste;
- b. source of the waste;
- c. reason why the waste was refused;
- d. final destination of the Rejected Waste, if known; and
- e. time and date of receipt and time and date of removal from the Site.

4.4 Storage

Anaerobic Digestion Facility

- (1) The Owner is approved to store the incoming solid Organic Waste indoors and as follows:
 - a. No more than 560 tonnes of the bulk Organic Waste shall be temporarily stored in the Storage Area with area of 280 m²;
 - b. The bulk Organic Waste shall be temporarily stored in Waste Receiving Bunker;
 - c. No more than 510 tonnes tonnes of the bulk Organic Waste shall be temporarily stored in the Storage Area consisting of the temporary storage area with area of 255 m²;
 - d. Containerized Organic Waste shall be temporarily stored in Containerized Waste Receiving Bunker;
 - e. The bulk Organic Waste shall be temporarily stored in the Waste Processing Bunker;
 - f. The bulk Organic Waste shall be temporarily stored in the Waste Processing Bunker;
- (2) The Owner is approved to store the incoming liquid Organic Waste as follows:
 - a. No more than 500 m³ of the FOG shall be temporarily stored in one (1) outdoor FOG Tank, at any one time;
 - b. No more than 500 m³ of the liquid IC&I Organic Waste shall be temporarily stored in each of two (2) outdoor Liquid IC&I Waste Organic Tanks, at any one time;
 - c. No more than 100 m³ of the liquid IC&I Organic Waste shall be temporarily stored in one (1) outdoor Quarantine Liquid IC&I Organic Waste Tank, at any one time;
 - d. No more than 750 m³ of the Digester feed shall be temporarily stored in each of three (3) outdoor Digester Feed Tanks, at any one time.
- (3) The Owner is approved to store the in-process and the processed Organic Waste at the Site as follows:

- a. no more than 6,000 m³ of digesting Organic Waste shall be stored in each of four (4) outdoor Digesters, at any one time;
 - b. no more than 8,000 m³ of the Digestate shall be stored in one (1) outdoor Digestate/Biogas Buffer Tank, at any one time;
 - c. no more than 75 m³ of the pasteurizing Organic Waste in each of three (3) outdoor Pasteurization Tanks, at any one time;
 - d. no more than 500 m³ of the pasteurized liquid Digestate shall be stored in one (1) outdoor Pasteurized Digestate Storage Tank, at any one time;
 - e. no more than 6,000 m³ of the Process Wastewater under treatment shall be stored in one (1) Wastewater Treatment Tank, at any one time;
 - f. no more than 90 m³ of the Process Wastewater under treatment shall be stored in one (1) dissolved air flotation system;
 - g. no more than 30 m³ of the treated Process Wastewater shall be stored in one (1) Water Reuse Buffer Tank; and
 - h. no more than 160 tonnes of solid Digestate shall be stored in four (4) trailers, at any one time.
- (4) The Owner shall ensure that,
- a. the solid bulk Organic Waste stored in the temporary storage areas in the receiving bays shall be processed within forty eight (48) hours from the time of its receipt; and
 - b. the solid bulk Organic Waste processing is scheduled so that oldest Organic Waste is processed first.

Tanks

- (5) The Owner shall ensure that sufficient storage capacity is available in the storage/processing tanks prior to loading of the liquids into the tanks.
- (6) The Owner shall,
- a. equip all storage and processing tanks with a liquid level monitoring device;
 - b. monitor and control the liquid levels in the liquid Waste storage/processing tanks on a continuous basis to ensure that the design storage capacity available within the tanks is not exceeded; and
 - c. ensure that the high level alarms are operational at all times.

- (7) A provision for an auditory alarm at the Site and a remote alarm to the dedicated Trained Personnel, when the high level setpoint in all storage/processing tanks is reached, shall be provided and be in place prior to the first receipt of the Organic Waste at the Site.
- (8) Should the high level setpoint in any storage/processing tank be reached, an auditory alarm at the Site and a remote alarm to the dedicated Trained Personnel shall be triggered.

Spill Containment

- (9) The outdoor storage/processing tanks shall be constructed within a spill containment area as set out in the supporting documentation listed in the attached Schedule "A".
- (10) The outdoor loading/unloading areas to transfer of liquids into and from the storage/processing tanks shall be constructed as set out in the supporting documentation listed in the attached Schedule "A".
- (11) The Owner shall ensure that a drip tray is placed under cam-lock connection when the liquids are being unloaded from or loaded into the tanker trucks.

Residual Waste

- (12) The Owner is approved to store the Residual Waste at the Site as follows:
 - a. no more than 10 tonnes the Residual Waste, limited to the Residual Waste resulting from the visual inspection screening of the Organic Waste in the Receiving Area, shall be stored in the Heavies Container located in the Storage Area;
 - b. no more than 256 tonnes of the solid Residual Waste, limited to the Residual Waste resulting from the Organic Waste processing at the Site, shall be stored in three (3) trailers, at any one time; and
 - c. used totes, pallets, carts and bins shall be stored in the designated area within the Containerized Waste Receiving Area as shown in the supporting documentation listed in the attached Schedule "A".
- (13) Storage of the solid Residual Waste from pre-processing of the Organic Waste at the Anaerobic Digestion Facility is subject to the following limitations:
 - a. solid Residual Waste shall be temporarily stored in three (3) trailers located within the confines of the Residual Waste Storage Area of the Organics Receiving Building, at all times;
 - b. the Residual Waste shall be transferred from the Site to an approved waste disposal site as soon as its transfer trailer is filled to its holding capacity.

- (14) Any temporary storage of the Clean-Out Material shall be as follows:
- a. the Clean-Out Material shall be kept separate from all other Digestate;
 - b. the Clean-Out Material shall be stored within the confines of the Organics Receiving Building, at all times.

Organic Waste Storage Limitations

- (15) No outside Organic Waste storage other than that described above, is approved under this Approval.
- (16) No storage of incoming Organic Waste in its transportation vehicle is approved under this Approval.
- (17) In the event that Organic Waste cannot be processed at the Site and the Site is at its approved Waste storage capacity, the Owner shall cease accepting additional Organic Waste. Receipt of additional Waste may be resumed once such receipt complies with the Waste storage limits approved in this Approval.

On-Site Generated Organic Waste

- (18) Solid putrescible waste generated through activities not relating to the handling and processing of the approved waste at the Site (ie. office, lunch room, etc.) shall be;
- a. handled in a manner that does not create an Adverse Effect and in accordance with the requirements of Regulation 347; and
 - b. may be processed at the Anaerobic Digestion Facility.

Transfer Facility

- (19) The Owner is approved to store the Municipal Waste at the Transfer Facility as follows:
- a. a maximum of 1,220 tonnes of the Waste for Final Disposal shall be stored within the confines of the Transfer Facility Building; and
 - b. a maximum of 2,047 tonnes of the Recyclable Waste shall be stored within the confines of the Transfer Facility Building or in trailers outdoors.
- (20) Storage of the solid Residual Waste at the Transfer Facility is subject to the following limitations:
- a. solid Residual Waste shall be temporarily stored one (1) trailer located within the confines of the Transfer Facility Building, at all times; and
 - b. the Residual Waste shall be transferred from the Transfer Facility to an approved waste disposal site as soon as its transfer trailer is filled to its holding capacity.

- (21) No outside storage, including in-trailer storage, of the Municipal Waste other than the in-trailer storage of the processed Recyclable Waste is approved under this Approval.
- (22) In the event that Municipal Waste cannot be processed at the Site and the Site is at its approved Waste storage capacity, the Owner shall cease accepting additional Municipal Waste. Receipt of additional Municipal Waste may be resumed once such receipt complies with the Municipal Waste storage limits approved in this Approval.

4.5 Approved Organic Waste Processing at the Anaerobic Digestion Facility

- (1) The following solid Organic Waste management activities are approved under this Approval:
 - a. receipt of the bulk Organic Waste in the receiving bays;
 - b. receipt of the Containerized Organic Waste in the designated loading dock;
 - c. temporary storage on the tipping floor and in the storage bunkers;
 - d. transfer of the Organic Waste to the Processing Areas;
 - e. Processing of the Organic Waste in the Processing Areas set out in Condition 1.2;
 - f. processing of the inorganic fraction from filter/screen or the pulper residuals with the use of any or all following processes:
 - i. air separation;
 - ii. water separation in a drum screen; and
 - iii. ferrous and non-ferrous constituents separation.
 - g. transfer of the Slurry to the Digester Feed Tanks;
 - h. mixing of the Slurry with the FOG to produce the Digester feed in the Digester Feed Tanks;
 - i. transfer of the Digester feed to the Digesters or transfer of the Digester feed to Centrifuge to concentrate the Digester feed prior to the Anaerobic Digestion or transfer to the Digesters and the Digestate/Biogas Buffer Tank during the Clean-out Contingency Operation; and
 - j. Anaerobic Digestion of the Digester feed in the Digesters or during the Clean-out Contingency Operation, in the Digesters and the Digestate/Biogas Buffer Tank.
- (2) The following the FOG management activities are approved under this Approval:
 - a. receipt of the FOG with the use of one (1) cam-lock connection;
 - b. temporary storage of the FOG in the FOG Tank; and
 - c. transfer of the FOG to Digester Feed Tanks for mixing with the Slurry.

- (3) The following liquid Digestate management activities are approved under this Approval:
- a. transfer of the Digestate to the Digestate/Biogas Buffer Tank;
 - b. transfer of the WAS to the Digestate/Biogas Buffer Tank; and
 - c. transfer of the Liquid Digestate to Pasteurization Tanks or to the de-watering equipment.
- (4) If pasteurizing liquid Digestate, the following liquid Digestate activities are approved under this Approval:
- a. pasteurization of the liquid Digestate;
 - b. transfer of the liquid Digestate to the pasteurized Pasteurized Digestate Storage Tank; and
 - c. transfer on the outdoor loading pad for shipment from the Site.
- (5) If de-watering liquid Digestate, the following activities are approved under this Approval:
- a. de-watering in four (4) centrifuges to generate the solid Digestate cake and the centrate;
 - b. transfer of the solid Digestate cake to the Pasteurization Screw Conveyor System; and
 - c. transfer of the centrate to the Wastewater Treatment System.
- (6) If pasteurizing solid Digestate in the Pasteurization Screw Conveyor System, the following solid Digestate management activities are approved under this Approval:
- a. pasteurization of the solid Digestate in the Pasteurization Screw Conveyor System; and
 - b. transfer of the pasteurized solid Digestate into up-to four (4) trailers in the loading bays of the Organics Receiving Building for shipment from the Site; or
 - c. transfer of the pasteurized solid Digestate to the Dryer.
- (7) If drying the pasteurized solid Digestate in the Dryer, the following Waste management activities are approved under this Approval:
- a. drying of the pasteurized solid Digestate in one (1) Dryer System with indirect steam heating and equipped with a cyclone and a condenser to pre-treat air from the Dryer prior to the Air Treatment System;
 - b. transfer of the dried solid Digestate into trailers for shipment off-site or to the Pelletizer System equipped with a cyclone to control dust emissions;
 - c. storage of sulphuric acid for use in the ammonia scrubber;
 - d. treatment of emissions from the Dryer in the ammonia scrubber;
 - e. temporary storage of the spent sulphuric acid scrubbing medium.
- (8) The following liquid IC&I Organic Waste management activities are approved under this Approval:
- a. receipt of the liquid IC&I Organic Waste with the use of two (2) cam-lock connections;
 - b. temporary storage in two (2) Liquid Tanks;
 - c. temporary storage in one (1) Quarantine Tank;

- d. pre-treatment of the liquid IC&I Organic Waste and/or of the Digestate Feed encompassing the following processes:
 - i. screening of the liquid IC&I Organic Waste in one (1) screen to produce solid Organic Waste destined for transfer to Organic Waste Processing Bunker and the centrate destined for de-watering in the pre-treatment centrifuge;
 - ii. de-watering of the screened liquid IC&I Organic Waste and/or of the Digestate Feed in one (1) centrifuge to produce the Primary Sludge for input into the Digester Feed Tanks and the centrate destined for Wastewater Treatment System;

- e. treatment of the centrate in the Wastewater Treatment System encompassing the following processes:
 - i. a single reactor system for High activity Ammonium Removal Over Nitrite System (SHARON System) to pre-treat the condensate from the Dryer System condenser, the centrate from liquid Digestate de-watering and the centrate from liquid IC&I Organic Waste pre-treatment;
 - ii. activated sludge Aerobic Treatment system for the effluent from SHARON System and for the centrate from IC&I Organic Waste pre-treatment;
 - iii. dissolved air flotation system to further treat the effluent from the Aerobic Treatment and to produce WAS to be transferred to the Digester Buffer Tank and the effluent to be transferred to the Water Reuse Buffer Tank or be discharged to the sanitary sewer;
 - iv. storage of the effluent and the liquid IC&I Organic Waste in the Water Re-Use Buffer Tank for re-use at the Site; and
 - v. Struvite Reactor to remove phosphate and nitrogen as struvite for mixing with the Digestate cake for disposal or further processing.

(9) The following Biogas management activities are approved under this Approval:

- a. transfer of the odourous air from Pasteurization Tanks and of the Biogas from Digesters to Digestate/Biogas Buffer Tank;
- b. pre-treatment and upgrading of the Biogas in the Biogas Upgrading System and injection of the Renewable Natural Gas into the natural gas infrastructure; or
- c. emergency flaring of the Biogas or emergency flaring of the Renewable Natural Gas.

4.6 Municipal Waste Management Activities at the Transfer Facility

(1) The following Municipal Waste management activities at the Transfer Facility are approved under this Approval:

- a. receipt of the Municipal Waste in the Transfer Facility Building;
- b. temporary storage of the Municipal Waste in the designated areas of the Transfer Facility

Building;

- c. transfer of the Municipal Waste destined for Final Disposal;
- d. manual sorting of the Recyclable Waste to separate different Waste types into their dedicated roll-off containers;
- e. transfer of the Residual Waste from sorting of the Recyclable Waste into a trailer for Final Disposal;
- f. baling of the Recyclable Waste limited to fibers, plastics, metals and textiles; and
- g. transfer of the sorted Recyclable Waste for further processing at an approved waste disposal site or for re-use in an ongoing commercial, manufacturing or industrial process or operation.

4.7 Rejected Waste Management Activities

Anaerobic Digestion Facility

- (1) The following Rejected Waste management activities are approved under this Approval:
 - a. inspection of the incoming Organic Waste for presence of the Rejected Waste;
 - b. temporary storage of the Rejected Waste at the Site; and
 - c. shipping the Rejected Waste back to the generator or to a Ministry-approved waste disposal site for Final Disposal or further processing.

Transfer Facility

- (2) The following Rejected Waste management activities are approved under this Approval:
 - a. inspection of the incoming Municipal Waste for presence of the Rejected Waste;
 - b. temporary storage of the Rejected Waste at the Site; and
 - c. shipping the Rejected Waste back to the generator or to a Ministry-approved waste disposal site for Final Disposal or further processing.

4.8 Residual Waste Management Activities

- (1) The following Residual Waste management activities are approved under this Approval:
 - a. temporary storage of the Residual Waste generated in the receiving area in the Heavies

Container;

- b. processing, including size reduction and compaction in three (3) Residual Waste trailer presses, of the Residual Waste;
 - c. transfer of the Residual Waste generated in the processing areas to Residual Waste Trailer Area; and
 - d. temporary storage of the Residual Waste generated in the processing areas in three (3) Residual Waste trailers.
- (2) Prior to shipping to a Ministry-approved waste disposal site for Final Disposal or further processing, the Residual Waste trailers shall be located indoors when being filled.
 - (3) The Owner shall ensure that all windows and doors of the Organics Receiving Building area for the Residual Waste trailers, are closed at all times, except when the doors are used for necessary personnel or vehicle entrance and exit.

4.9 Solid Organic Waste Pre-Processing

- (1) All pre-treatment of solid Organic Waste shall be carried out within the confines of the Receiving Building.
- (2) The Owner shall ensure that effective local capture of odour emissions (source extraction) is in place at all times when the pre-treatment of solid Organic Waste is being carried out.
- (3) The Owner shall ensure that all odours generated by the pre-treatment of solid Organic Waste area are discharged into the Air Treatment System.

4.10 Liquid IC&I Organic Waste Pre-Processing

- (1) Pre-treatment of the liquid IC&I Organic Waste requiring concentrating of solids, shall be carried out within the confines of the Receiving Building.
- (2) The Owner shall ensure that effective local capture of odour emissions (source extraction) is in place at all times when the pre-treatment of liquid IC&I Organic Waste is being carried out.
- (3) The Owner shall ensure that all odours generated by the pre-treatment of liquid IC&I Organic Waste area are discharged into the Air Treatment System.

4.11 Digester Feed Tanks

- (1) The Digester Feed Tanks shall be insulated, heated and mixed as proposed in the supporting documentation listed in the attached Schedule "A".

- (2) Digester feed shall be transferred to,
 - a. the Digesters for Anaerobic Digestion;
 - b. the Digesters and the Digestate/Biogas Buffer Tank for Anaerobic Digestion during the Clean-out Contingency Operation; and
 - c. to Liquid IC&I Organic Waste Pre-Processing area centrifuge to concentrate solids in the liquid Organic Waste.
- (3) The Owner shall ensure that the headspace of the Digester Feed Tanks shall be exhausted into the Air Treatment System.

4.12 Anaerobic Digestion

- (1) No more than 6,000 m³ of the Organic Waste from the Digester Feed Tanks shall be contained and processed within each of the four (4) Digesters located at the Site, at any one time.
- (2) Each Digester shall be mechanically mixed, insulated, heated and covered with a fixed roof.
- (3) Treatment of the Organic Waste in the Digesters shall be carried out in the mesophilic temperature range, with the operating temperature target of 40°C, or at thermophilic temperature range, with the operating temperature target of temperature of 55°C, as proposed in the supporting documentation listed in the attached Schedule "A", at all times.
- (4) The Owner shall ensure that a minimum hydraulic retention time of the Organic Waste in each Digester is at least twenty (20) days for Anaerobic Digestion under mesophilic conditions or under thermophilic conditions, as proposed in the supporting documentation listed in the attached Schedule "A", at all times.
- (5) When using the Digestate/Biogas Buffer Tank for Anaerobic Digestion of the Organic Waste;
 - a. a minimum hydraulic retention time of the Organic Waste in each operational Digester and the Digestate/Biogas Buffer Tank, shall be at least twenty (20) days for Anaerobic Digestion, as proposed in the supporting documentation listed in the attached Schedule "A", at all times.
- (6) The liquid level, temperature and duration of the processing in the Digesters and the Digestate/Biogas Buffer Tank shall be monitored to verify compliance with Conditions 4.7(3), (4) and (5).
- (7) Ferric compound addition into the Digesters for the purpose of hydrogen sulphide removal shall be carried out in accordance with the supporting documentation listed in the attached Schedule "A".
- (8) The Biogas in the headspace of each Digester shall be contained and exhausted into the

Digestate/Biogas Buffer Tank, as proposed in the supporting documentation listed in the attached Schedule "A".

- (9) The Digestate/Biogas Buffer Tank shall be mechanically mixed, insulated, heated and covered with a double membrane cover with a maximum permeability of less than $400 \text{ cm}^3/\text{m}^2 \cdot \text{bar} \cdot \text{day}$.
- (10) The air space between the double membrane shall be exhausted to and controlled by a carbon filter described in the supporting documentation listed in the attached Schedule "A" and as approved in the Air Approval.
- (11) The Biogas in the headspace of the Digestate/Biogas Buffer Tank shall be exhausted into the Biogas Upgrading System or the flare.
- (12) The Owner shall electronically monitor the over/under pressure relief valves on the Digesters and the Digestate/Biogas Buffer Tank, to ensure that if they are open, it is recorded and the Owner is notified. Should any unintentional raw (untreated) Biogas be released from the over/under pressure relief valves to the atmosphere, regardless of quantity, the Owner shall immediately notify the Ministry, in writing.
- (13) The Digesters shall be equipped with,
 - a. sampling ports or other means by which a sample can be taken that represents the Organic Waste entering the Digesters to allow for collection of samples of the Organic Waste for the testing required under this Approval; and
 - b. sampling ports or other means by which a sample can be taken that represents the contents of the Digesters before the Digestate from the Digesters enters into the Digestate/Biogas Buffer Tank, to allow for collection of samples of the Digestate for the testing required under this Approval.
- (14) The Digestate/Biogas Buffer Tank shall be equipped with sampling ports or other means by which a sample can be taken that represents the contents of the Digestate/Biogas Buffer Tank before the Digestate from the Digestate/Biogas Buffer Tank enters into the Pasteurization Tanks or is directed to the de-watering system, to allow for collection samples of the Digestate for the testing required under this Approval.

4.13 Pasteurization (Heat Treatment)

- (1) The Owner shall ensure that all Digestate is pasteurized (heat-treated) to inactivate pathogens prior to its transfer from the Site for land application as set out in this Approval.
- (2) All Digestate shall be pasteurized in the Pasteurization Tanks or in the Pasteurization Screw Conveyor System in accordance with this Approval.

- (3) The requirements for pasteurization of liquid Digestate are as follows:
- a. pasteurization of the liquid Digestate shall be carried out in three (3) insulated, heated and mixed Pasteurization Tanks operating in parallel;
 - b. the Pasteurization Tanks shall be located indoors, be constructed fully above grade as proposed in the supporting documentation listed in the attached Schedule "A";
 - c. all liquid Digestate introduced into the Pasteurization Tanks shall have a dry matter content of less than 18 per cent and have a slump of less than 150 millimetres using the Slump Test;
 - d. the Owner shall ensure that pasteurization in the Pasteurization Tanks is undertaken at a minimum temperature of 70°C for a minimum of one (1) hour to ensure the complete inactivation of pathogens in the liquid Digestate as set out in the supporting documentation listed in the attached Schedule "A";
 - e. the Owner shall ensure complete mixing in the Pasteurization Tanks to ensure that all Digestate is pasteurized to inactivate pathogens as required in this Approval;
 - f. the temperature of pasteurization in the Pasteurization Tanks shall be monitored with a minimum of two (2) thermocouples installed separately, to verify compliance with Condition 4.13(3)d.; and
 - g. monitoring results of the time and temperature of the pasteurization shall be available in a graphical format to demonstrate compliance with the pasteurization requirements in this Approval.
- (4) The requirements for pasteurization of the solid Digestate are as follows:
- a. the Owner shall ensure that pasteurization of solid Digestate in the Pasteurization Screw Conveyor System is undertaken at a minimum temperature of 72°C with residence time of 20 minutes or greater to ensure the complete inactivation of pathogens in the solid Digestate as set out in the supporting documentation listed in the attached Schedule "A";
 - b. the temperature of pasteurization in the Pasteurization Screw Conveyor System shall be monitored with a minimum of two (2) thermocouples installed separately located at the beginning and the end of the Pasteurization Screw Conveyor System, to verify compliance with Condition 4.13(4)a.;
 - c. monitoring results of the time and temperature of the heat treatment in the Pasteurization Screw Conveyor System shall be available in a graphical format to demonstrate compliance with the pasteurization requirements in this Approval.
- (5) Drying of the solid Digestate cake in the Dryer is not considered pasteurization for the purpose of

pathogen inactivation required under this Approval.

- (6) A provision for an auditory alarm at the Site and a remote alarm to the dedicated Trained Personnel, when required pasteurization temperature is not being achieved, shall be provided and be in place prior to the first receipt of the Organic Waste at the Site.
- (7) Should the pasteurization temperature monitoring show an excursion from the required setpoint, an auditory alarm at the Site and a remote alarm to the dedicated Trained Personnel shall be triggered.
- (8) The Owner shall ensure that headspace of the Pasteurization Tanks is exhausted into the headspace of the Digestate/Biogas Buffer Tank, as proposed in the supporting documentation listed in the attached Schedule "A".
- (9) The Owner shall ensure that the air discharge from the Pasteurization Screw Conveyor System is exhausted into the ventilation system for the Organics Receiving Building.

4.14 Liquid Digestate Handling

- (1) Prior to its transfer off-Site, the pasteurized liquid Digestate shall be temporarily stored in the fully mixed Pasteurized Digestate Storage Tank that shall be sealed as set out in the supporting documentation listed in the attached Schedule "A", at all times.
- (2) The Owner shall ensure that headspace of the Pasteurized Liquid Digestate Tank is exhausted into the headspace of the Digestate/Biogas Buffer Tank, as proposed in the supporting documentation listed in the attached Schedule "A".
- (3) The pasteurized liquid Digestate shall be loaded into the transfer vehicles via a fixed quick-connect in the tanker truck loading area.
- (4) The liquid Digestate de-watering area shall be equipped with ventilation system source extraction points.

4.15 Process Wastewater Management

- (1) The Owner shall ensure that all wastewater, including the run-off from truck washing generated within the Organics Receiving Building, is:
 - a. contained within the leak-proof collection and storage systems, at all times;
 - b. collected in the sufficiently designed storage; and
 - c. collected for treatment approved under this Approval.
- (2) The Owner shall regularly empty, clean and disinfect if necessary, all sumps or wastewater

storage/holding areas that are used to contain and collect the wastewater generated within the Organics Receiving Building.

4.16 Biogas Management

- (1) All Biogas shall be treated in the Biogas Upgrading System or transferred to the Biogas Flare system at all times.
- (2) The Owner shall maintain the Biogas Flare system as a fully functional stand-by system, so that in the instance of a process upset and/or when the Biogas upgrading system is inoperable or producing Renewable Natural Gas that is out of compliance with the required quality criteria, the Biogas Flare may be utilized to combust the Biogas.
- (3) Treated Biogas which does not meet the required Renewable Natural Gas quality criteria shall be transferred to the Biogas Flare for flaring.
- (4) The Owner shall ensure that the Biogas Flare system is designed and operated to comply, at all times, with a destruction efficiency of at least 98%.
- (5) Condensate from Biogas Upgrading System shall be transferred to the Wastewater Treatment System.

4.17 Ventilation

- (1) The Owner shall ensure that effective local capture of odour emissions is in place, at all times when the pre-treatment of solid Organic Waste is being carried out.
- (2) The Owner shall ensure that the ventilation system maintains the cascading air flow in the Organics Receiving Building, at all times, and in accordance with the supporting documentation listed in the attached Schedule "A".

4.18 Prohibitions

- (1) Burning of any Wastes, other than the Biogas/odourous air mixture, as approved in this Approval, is prohibited at the Site.
- (2) Other uses of the Renewable Natural Gas produced at the Site, other than use at the Site or injection into the natural gas distribution infrastructure, are not approved under this Approval.
- (3) Crushing of glass or porcelain is prohibited at the Site.
- (4) There shall be no public access to the Site for any waste drop off.
- (5) There shall be no outdoor storage of waste at the Site, except as approved in this Approval.

- (6) No Residual Waste from the Anaerobic Digestion Facility shall be received at the Transfer Facility.
- (7) No putrescible waste shall be received at the Transfer Facility.
- (8) No leachate, process wastewater or contaminated water shall be used for irrigation of the biofilter.

5.0 EQUIPMENT and SITE INSPECTIONS and MAINTENANCE

5.1 Inspections

- (1) Within thirty (30) days from the issuance of this Approval or as acceptable to the District Manager, the Owner shall prepare a comprehensive written inspection program which includes procedures for inspections of all aspects of the Transfer Facility operations, including the following:
 - a. Waste loading/unloading/storage/handling areas;
 - b. condition of all major pieces of the equipment;
 - c. condition of all instruments for monitoring required under this Approval;
 - d. security fence and property line;
 - e. presence of excessive fugitive dust emissions from the operation of the Site;
 - f. presence of the on and off-Site litter; and
 - g. presence of off-Site odours.
- (2) At least one (1) month prior to Commencement of Phase 1a or as acceptable to the District Manager, the Owner shall prepare a comprehensive written inspection program which includes procedures for inspections of all aspects of the Anaerobic Digestion Facility's operations including the following:
 - a. Waste, Digestate and any other waste loading/unloading/storage/handling areas;
 - b. condition of all major pieces of the equipment;
 - c. condition of all instruments for monitoring required under this Approval;
 - d. security fence and property line;

- e. presence of excessive fugitive dust emissions from the operation of the Site;
 - f. presence of the on and off-Site litter; and
 - g. presence of off-Site odours.
- (3) The inspection program shall be up-dated, as required, shall be retained at the Site and be made available for inspection by a Provincial Officer, upon request.
- (4) The Owner shall ensure that the required Site inspections are undertaken daily by the Trained Personnel in accordance with the applicable inspection program to ensure that all Equipment and facilities at the Site are maintained in good working order at all times and that no off-Site impacts are occurring. Any deficiencies detected during these regular inspections must be promptly corrected.

5.2 Spare Parts

- (1) The Owner shall prepare a list of critical spare parts and update this list annually or more frequently, if necessary, to ensure that this list is maintained up-to-date. The list shall be retained at the Site and be made available for inspection by a Provincial Officer, upon request.
- (2) The Owner shall ensure that the critical spare parts are available at the Site at all times or be immediately available from an off-Site supplier.

5.3 Maintenance

- (1) The Owner shall develop and implement a preventative maintenance program for all on-Site equipment associated with the processing and managing of Wastes and control of fugitive odour and dust emissions.
- (2) The preventative maintenance program referred to in Condition 5.3(1) shall be maintained up-to-date, be retained at the Site and be available for inspection by a Provincial Officer, upon request.

6.0 WASTE QUALITY CRITERIA

- (1) For the purpose of demonstrating compliance with the quality criteria set out in this condition, the Owner shall use the most recent results of the required analysis.

6.1 Incoming Organic Waste Quality Criteria

- (1) The Owner shall ensure that the incoming Organic Waste from each source, prior to pre-processing or after pre-processing if contamination needs to be removed, complies with the metal content limits for the Off-Farm Anaerobic Digestion Materials set out in O. Regulation 276/03.

6.2 The Digestate or the Clean-Out Material Quality Criteria

- (1) If the Digestate or the Clean-Out Material is managed as a material destined for land application on agricultural land,
 - a. the liquid Digestate or the Clean-Out Material shall contain a minimum of 15% of total organic matter/weight of the solids;
 - b. the solid Digestate or the Clean-Out Material shall contain a minimum of 15% of total organic matter/total weight of the solids; and
 - c. unless O. Regulation 267/03 requires otherwise for a NASM, the Digestate or the Clean-Out Material shall comply with the following requirements:
 - i. regulated metal shall not exceed the maximum concentrations set out in column 2 or 3, as applicable, of Table 2 of Schedule 5 of O. Regulation 267/03;
 - ii. E. coli shall not exceed the maximum E. coli levels set out in column 2 of Table 3 of Schedule 6 O. Regulation 267/03 if it is material containing less than 1 per cent total solids, wet weight or column 3 of Table 3 of Schedule 6 O. Regulation 267/03, if it is material containing 1 per cent or more total solids, wet weight;
 - iii. Foreign Matter shall not exceed 2% calculated on a dry basis,
 - iv. plastics shall not exceed 0.5% calculated on a dry basis, and
 - v. there shall not be any particle with size greater than 2.5 cm².
- (2) If the Digestate or the Clean-Out Material is managed as a waste destined for land application on non-agricultural land;
 - a. the Digestate or the Clean-Out Material shall meet the quality criteria required by the conditions of the Environmental Compliance Approval for the site where it is to be land-applied; or
 - b. in the absence of specific quality criteria requirements in the Environmental Compliance Approval for the site where the Digestate or the Clean-Out Material is to be land-applied, it

shall meet the requirements set out in Condition 6.2(1) of this Approval.

- (3) Any Residual Waste, including the Clean-Out Material to be transferred for further processing or Final Disposal shall meet the quality criteria required by the conditions of the Environmental Compliance Approval for the site where it is to be transferred to.

6.3 Renewable Natural Gas Quality Criteria

- (1) Renewable Natural Gas shall comply with the applicable criteria required by the owner/operator of the natural gas distribution infrastructure for its intended injection into the said natural gas distribution infrastructure.

7.0 TESTING and MONITORING

7.1 Testing of Incoming Organic Waste

- (1) The Owner shall ensure that prior to its first acceptance of a given new incoming Organic Waste, the incoming Organic Waste is characterized during the 14-day period preceding its first-time receipt at the Site.
- (2) If the Owner relies on the published data for the well-studied/characterized incoming Organic Waste, the latest published information shall be used to confirm that the characteristics of the incoming Organic Waste to be received at the Site are in compliance with the incoming Organic Waste quality criteria required under this Approval.
- (3) If the published data is not available or used to confirm compliance of the incoming Organic Waste with the quality criteria from this Approval, the Owner shall ensure that at least three (3) representative grab samples of the incoming Organic Waste are obtained from the proposed incoming Organic Waste stream and characterized, each time the characterization is required.
- (4) The Owner shall ensure that each sample of the incoming Organic Waste has been analysed for metals identified as the requirements for the Off-Farm Anaerobic Digestion Materials set out in O. Regulation 267/03, in accordance with the methods and frequencies specified in this Approval.
- (5) The Owner shall ensure a copy of the analysis sets out the metal concentration in each Organic Waste in:
 - a. milligrams of metal per kilogram of total solids, dry weight, in case of the analysis of metals in materials that have a concentration of total solids of 10,000 milligrams or more per litre; and
 - b. milligrams of metal per litre, in the case of the analysis of regulated metals in materials that have a concentration of total solids of less than 10,000 milligrams per litre.

- (6) The analysis of samples of the incoming Organic Wastes shall be performed in accordance with the Sampling and Analysis Protocol and by:
 - a. a laboratory that is accredited by the Ministry of Agriculture, Food and Rural Affairs for that purpose; or
 - b. a laboratory that is accredited in accordance with the International Standard ISO/IEC 17025 - General Requirement for the Competence of Testing and Calibration Laboratories, dated December 15, 1999, as amended from time to time.
- (7) Once the initial Organic Waste characterization shows compliance with the quality criteria required under this Approval, the Organic Waste source may be considered a pre-approved source.
- (8) Following the initial characterization of the incoming Organic Waste, the Owner shall ensure that subsequent sampling and analysis is conducted for every 1,000 m³ of the given Organic Waste or once a year, whichever comes first, provided the said Organic Waste is of the same type and is from the same source. If, after the first twelve (12) months of sampling and analysis, the results are consistent and continuously below the prescribed limits, sampling and analysis shall be conducted for the given Organic Waste once a year or following any process changes, operational issues or other factors that may affect the quality of the said Organic Waste from the pre-approved source.
- (9) The incoming Organic Waste shall not be accepted at the Site if the analytical requirements listed in this Approval have not been fulfilled or if the analysis of the said Organic Waste as described in this Approval determines that the metal content in the said Organic Waste exceeds the metal content limits set out in Condition 6.1(1).
- (10) In order to resume accepting a given Organic Waste following previous rejection, the Owner shall ensure that the analytical requirements listed in this Approval have been fulfilled and that two (2) sampling events of the said Organic Waste generate analytical results which, separately and consecutively, do not exceed the metal content limits set out in Condition 6.1(1).
- (11) Should results of testing of the incoming Organic Waste fail to meet the quality criteria specified in this Approval, the said Organic Waste shall be handled in accordance with the Contingency and Emergency Response Plan.

7.2 Testing for Thermophilic Anaerobic Digestion

- (1) Prior to commencing Anaerobic Digestion under thermophilic conditions, the Owner shall test the inputs into the Digesters and outputs from the Digestate/Biogas Buffer Tank to establish baseline operating parameters for the Anaerobic Digestion under mesophilic conditions.
- (2) As a minimum the Owner, shall carry out process testing and monitoring for the following:

- a. organic loading rate into the Digesters as Volatile Solids (VS) or Chemical Oxygen Demand (COD) rate;
 - b. organic output rate from the Digestate/Biogas Buffer Tank to determine VS or COD destruction;
 - c. Biogas production rate;
 - d. Volatile Organic Acids (FOS) and Total Inorganic Carbon (TAC) to determine the FOS/TAC ratio that is an indicator of Anaerobic Digestion stability; and
 - e. residual Biogas potential of the Digestate.
- (3) During transition from mesophilic Anaerobic Digestion to thermophilic Anaerobic Digestion, the Owner shall carry out process testing and monitoring as proposed in the supporting documentation listed in the attached Schedule "A".
- (4) Upon completion of the transition from mesophilic Anaerobic Digestion to thermophilic Anaerobic Digestion, the Owner shall carry out process testing and monitoring for the parameters listed in Condition 7.2(2).

7.3 Testing for Anaerobic Digestion in the Digestate/Biogas Buffer Tank

- (1) Prior to using the Digestate/Biogas Buffer Tank for Anaerobic Digestion of the Organic Waste, the Owner shall establish baseline operating parameters for the Anaerobic Digestion in the Digesters under the comparable conditions.
- (2) As a minimum the Owner, shall test for the parameters listed in Condition 7.2(2).

7.4 Testing of the Digestate

- (1) If the Digestate is managed as a waste destined for land application on non-agricultural land, the Owner shall,
- a. undertake quality control sampling and testing as required by the conditions of the Environmental Compliance Approval for the site where the Digestate is to be land-applied; and
 - b. in the absence of specific sampling and testing requirements in the Environmental Compliance Approval for the site where the Digestate is to be land-applied, the Owner shall undertake quality control sampling and testing required by the regulations, policies and guidelines under the NMA, including but not limited to the Sampling and Analysis Protocol.
- (2) If the Digestate is managed as a NASM destined for land application on agricultural land, the Owner shall undertake quality control sampling and testing required by the regulations, policies

and guidelines under the NMA, including but not limited to the Sampling and Analysis Protocol.

7.5 Testing of the Clean-Out Material

- (1) Any Clean-Out Material to be applied to agricultural land shall be tested as follows:
 - a. Testing must be carried out in accordance with the Sampling and Analysis Protocol.
 - b. Every sample collected for analysis must be a composite sample.

7.6 Pasteurization/Anaerobic Digestion Monitoring

- (1) The temperature of pasteurization in the Pasteurizer Tanks shall be continuously monitored and recorded.
- (2) The liquid level and the temperature of the processing in the Digesters shall be continuously monitored and recorded.

7.7 Biogas/Renewable Natural Gas Monitoring

- (1) The Biogas and the Renewable Natural Gas production rate and quality shall be monitored in accordance with the proposal set out in the supporting documentation listed in the attached Schedule "A".

8.0 END-USE of OUTPUTS

8.1 End-use of Digestate

- (1) All Digestate shipped from the Site as a Fertilizer must be accompanied by a Product Label that has been approved by the CFIA
- (2) Subject to the CFIA's Fertilizer registration requirements, prior to each initial shipment for each Fertilizer label, the Owner shall provide to the Director and the District Manager a notification from the CFIA that the Digestate generated at the Site has been assessed and approved for use as a Fertilizer under the Fertilizers Act.
- (3) In addition to the notification required by Condition 8.1(2), above, the Owner shall provide to the Director and District Manager the following information:
 - a. a copy of the complete application package submitted to the CFIA in support of the request to manufacture the Fertilizer;
 - b. the specific requirements of the CFIA that must be met for the Digestate to be considered as a Fertilizer including all process monitoring, analytical, and quality assurance / quality control requirements;

- c. a statement whether the label is a new label or if it has been re-issued as a result of a change to the incoming Organic Waste type or quality or a process change triggering a requirement for a new Fertilizer label as required by the CFIA; and
 - d. a copy of the approved Product Label.
- (4) If the Digestate is not offered for sale or is not sold as a Fertilizer in accordance with the Fertilizers Act, but the Digestate is to be land-applied to agricultural land, the Digestate shall be managed in accordance with the requirements of the NMA.
 - (5) If the Digestate is not offered for sale or is not sold as a Fertilizer in accordance with the Fertilizers Act, but is to be land-applied on agricultural land in accordance with the requirements set out under the NMA, upon commencement of processing of the SSO containing a Human Body Waste constituent, the Digestate resulting from the Anaerobic Digestion at the Site is a waste containing Human Body Waste and its transfer from the Site to a land application receiving site shall only be with a written notification to the receiving site's owner that the Digestate contains Human Body Waste so that the receiving site owner can determine the applicable regulatory requirements under the NMA.
 - (6) If the Digestate is not managed as a Fertilizer or in accordance with the requirements of the NMA, it is considered a processed organic waste, as defined in Regulation 347, and it shall be managed as follows:
 - a. Digestate managed as waste shall only be in accordance with the requirements of the EPA and the OWRA and any other relevant Ministry legislation;
 - b. Digestate managed as waste shall only be removed from the Site by a hauler approved by the Ministry to transport such waste, as required;
 - c. Digestate managed as waste shall be transferred for further processing or final disposal to a Ministry-approved site or a site approved to accept such waste by an equivalent jurisdiction.

8.2 End-use of Spent Ammonia Scrubber Reagent (Ammonium Sulphate)

- (1) All Ammonium Sulphate shipped from the Site as a Fertilizer must be accompanied by a Product Label that has been approved by the CFIA
- (2) Subject to CFIA's Fertilizer registration requirements, prior to each initial shipment for each Fertilizer label, the Owner shall provide to the Director and the District Manager a notification from the CFIA that the Ammonium Sulphate generated at the Site, has been assessed and approved for use as a Fertilizer under the Fertilizers Act.
- (3) In addition to the notification required by Condition 8.2(1), above, the Owner shall provide to the Director and District Manager the following information:

- a. a copy of the complete application package submitted to the CFIA in support of the request to manufacture the Fertilizer;
 - b. the specific requirements of the CFIA that must be met for the Ammonium Sulphate to be considered as a Fertilizer including all process monitoring, analytical, and quality assurance / quality control requirements;
 - c. a statement whether the label is a new label or if it has been re-issued as a result of a change to the incoming Organic Waste type or quality or a process change triggering a requirement for a new Fertilizer label as required by the CFIA; and
 - d. a copy of the approved Product Label.
- (4) If the Ammonium Sulphate is not offered for sale or is not sold as a Fertilizer in accordance with the Fertilizers Act, but the Ammonium Sulphate is to be land-applied to agricultural land, the Ammonium Sulphate shall be managed in accordance with the requirements of the NMA.
- (5) If the Ammonium Sulphate is not managed as a Fertilizer or in accordance with the requirements of the NMA, it is considered a waste and it shall be managed as follows:
- a. Ammonium Sulphate managed as a waste shall only be in accordance with the requirements of the EPA and the OWRA and any other relevant Ministry legislation;
 - b. Ammonium Sulphate managed as a waste shall only be removed from the Site by a hauler approved by the Ministry to transport such waste, as required;
 - c. Ammonium Sulphate managed as a waste shall be transferred for further processing or final disposal to a Ministry-approved site or a site approved to accept such waste by an equivalent jurisdiction.

8.3 End-use of Biogas/Renewable Natural Gas

- (1) Treated Biogas is considered to be Renewable Natural Gas when it meets the requirements for injection into the natural gas distribution infrastructure.
- (2) Treated Biogas which does not meet the required Renewable Natural Gas quality criteria shall be re-processed or transferred for flaring.

9.0 NUISANCE IMPACT CONTROL and HOUSEKEEPING

9.1 Trucks and Traffic

- (1) The Owner shall visually inspect the vehicles that have delivered the Waste to the Site for evidence of leaking or dripping waste. The Owner of the vehicles that leak shall be given a written notice of the presence of the leak. The notice shall include the vehicle owner's name, the

vehicle Environmental Compliance Approval number, the type of Waste delivered to the Site and the date of the delivery. A copy of the notice shall be retained at the Site and it shall be provided to the Ministry staff upon request.

- (2) The Owner shall ensure that the exterior of all vehicles delivering the Waste to the Site is washed prior to their departure from the Site, as appropriate.
- (3) The Owner shall ensure that there is no queuing or parking of vehicles that are waiting to enter the Site on any roadway that is not a distinct part of the Site.
- (4) The Owner shall ensure that the vehicles transporting waste to and from the Site use the designated on-Site traffic routes.
- (5) The Owner shall ensure that all new drivers of vehicles transporting waste to and from the Site are instructed/trained on the acceptable on-Site traffic routes.
- (6) The Owner shall ensure that all vehicles hauling waste, including those carrying the Digestate, are adequately covered to prevent fugitive odour or dust emissions during transport.
- (7) All waste must be transported to and from the Site in accordance with the EPA and Regulation 347 and in vehicles that have been approved by the Ministry or registered on the EASR, as required.
- (8) The Owner shall ensure that all drivers of vehicles making deliveries and removing waste from to the Site are made aware of the protocols to manage opening and closing of the doors in the buildings at the Site.
- (9) The Owner shall determine the Site access truck traffic routes and shall ensure that all drivers of vehicles making deliveries and removing waste from to the Site are made aware of the traffic routes restrictions and requirements.

9.2 Litter

- (1) The Owner shall prevent the escape of litter from the Site and pick up litter around the Site on a daily basis, or more frequently if necessary.

9.3 Vectors, Vermin and Wildlife

- (1) The Owner shall:
 - a. implement necessary housekeeping procedures to eliminate sources of attraction for vermin, vectors and wildlife; and
 - b. if necessary, hire a qualified, licensed pest control professional to design and implement a pest control plan for the Site.

9.4 Birds

- (1) A minimum of six (6) months prior to the first receipt of the Organic Waste at the Site, the Owner shall prepare a bird monitoring protocol for the Site and submit the protocol to the District Manager for concurrence. The protocol shall include any necessary bird population control measures that need to be implemented to minimize a threat to the safety of operations at Oshawa Executive Airport.
- (2) The Owner shall implement the protocol immediately upon receipt of the District Manager's concurrence.

9.5 Organics Receiving Building Testing

- (1) Prior to the receipt of the Organic Waste at the Site, the Owner shall test the Organics Receiving Building envelope to identify any unplanned leakage points in the Organics Receiving Building.
- (2) The testing shall be carried out by a licensed structural engineer in accordance with the test protocol as required in the Air Approval.
- (3) The testing shall be repeated as directed or agreed by the District Manager.

9.6 Fugitive Emissions to the Atmosphere

- (1) The Owner shall ensure that the floor of the Organics Receiving Building and any Organic Waste temporary storage areas are cleaned regularly, including being washed down, as required.
- (2) The Owner shall regularly clean all equipment used to handle and process the Organic Waste at the Site, as required.
- (3) The Owner shall ensure that all on-site roads and operations/yard areas are regularly swept/wetted to prevent dust impacts off-Site.
- (4) The Owner shall electronically monitor the over/under pressure relief valves on the Digesters to ensure that if they are open, it is recorded and the Owner is notified. Should any unintentional raw (untreated) Biogas be released from the over/under pressure relief valves to the atmosphere, regardless of quantity, and leave the Site, the Owner shall immediately notify the Ministry in accordance with the requirements in Condition 13.0.
- (5) The Owner shall maintain the Biogas flare at the Site and combust off-specification Biogas in the instance of a process upset.

10.0 COMPLAINT MANAGEMENT

- (1) A designated representative of the Owner shall be available to receive public complaints caused

by the operations at the Site twenty-four (24) hours per day, seven (7) days per week.

- (2) If at any time, the Owner receives any environmental complaints from the public regarding the operation of the Site, the Owner shall respond to these complaints according to the following procedures:
- a. Step 1: Receipt of Complaint - The Owner shall record each complaint in a computerized tracking system. The information recorded shall include the following:
 - i. the name, address and the telephone number (or contact information) of the complainant, if known;
 - ii. the date and time of the complaint; and
 - iii. details of the complaint, including the description and duration of the incident.
 - b. Step 2: Investigation of Complaint - After the complaint has been received by the Owner and recorded in the tracking system, the Owner shall, immediately notify, either the District Manager by phone during office hours or the Ministry's Spills Action Centre at 1-800-268-6060 after office hours. The Owner shall immediately initiate investigation of the complaint. The investigation shall include, as a minimum, the following:
 - i. determination of the activities undertaken in the Site at the time of the complaint;
 - ii. general meteorological conditions including, but not limited to the ambient temperature, approximate wind speed and its direction, sunny versus cloudy, inversion versus clear and windy, etc. at the time of the complaint;
 - iii. location of the person who submitted the complaint, if known, at the time of the incident; and
 - iv. determination if the complaint is attributed to activities being undertaken at the Site and if so, determination of all the possible cause(s) of the complaint;
 - c. Step 3: Corrective Action - The Owner shall determine the remedial action(s) to address the cause(s) of the complaint and implement the remedial action(s) to eliminate the cause(s) of the complaint, as soon as practicably possible, and to prevent a similar occurrence in the future;
 - d. Step 4: Written Response - The Owner shall forward a formal reply to the complainant, if known and to the District Manager within one (1) week after the receipt of the complaint. The response shall include the results of the investigation of the complaint, the action(s) taken or planned to be taken to address the cause(s) of the complaint, and if follow-up response would be provided.
 - e. Step 5: Recording - All of the information collected and actions taken must be recorded in the tracking system.

- (3) If the District Manager deems the remedial measures taken as per Condition 10.0(2)c. to be unsuitable, insufficient or ineffective, the District Manager may direct the Owner, in writing, pursuant to the remedial order section (s.17) or the preventative measures order section (s.18) of the EPA to take further measures to address the noted failure, upset or malfunction, including but not limited to the following:
- a. reduction in the receipt of the waste;
 - b. cessation of the receipt of the waste;
 - c. removal and off-site disposal of waste; and
 - d. repairs or modifications to the equipment or processes at the Site, that may include the following actions:
 - i. the Owner may prohibit use of specific doors under some circumstances or atmospheric conditions;
 - ii. the Owner may increase the magnitude of the negative pressure to be maintained in the Organics Receiving Building;
 - iii. the Owner may increase the number of air exchanges in the areas suspected of causing fugitive odour emissions escaping from the Organics Receiving Building; and
 - iv. the Owner may retrofit the design of the ventilation system within the Organics Receiving Building to provide a more effective local capture of the odours from the odour sources within the Organics Receiving Building; and
 - e. further investigation of possible sources of fugitive air emissions from the Site as follows:
 - i. the Owner shall develop of a plan, prepared by a Professional Engineer, for assessment of other possible sources of fugitive air emissions originating from the Organic Waste received and processed at the Site;
 - ii. the Owner shall conduct the assessment of other possible sources of fugitive air emissions, as directed or agreed by the District Manager as per the plan prepared in accordance with Paragraph 10(3)e.i. of this Approval;
 - iii. the Owner shall prepare and submit a report prepared by a Professional Engineer on the assessment of other possible sources of fugitive air emissions to the Director and the District Manager within two (2) months after completing the assessment of other possible sources of fugitive air emissions; and

- iv. implement the recommendations identified in the assessment of other possible sources of fugitive air emissions report within two (2) months after completing the assessment of other possible sources of fugitive air emissions or as directed or agreed by the District Manager.

11.0 OPERATIONS MANUAL and STAFF TRAINING

11.0 Operations Manual

- (1) The Owner shall prepare an Operations Manual for use by the Site personnel. As a minimum, the Operations Manual shall contain the following:
 - a. outline the responsibilities of Site personnel;
 - b. personnel training protocols;
 - c. waste receiving and screening procedures;
 - d. waste unloading, handling, storage and processing procedures;
 - e. process monitoring procedures;
 - f. sampling and testing procedures;
 - g. Site inspections, spill, fire, upset and leakage recording procedures;
 - h. procedure for handling complaints as described in this Approval.
- (2) A copy of the Operations Manual shall be kept at the Site, must be accessible to personnel at all times and must be updated, as required.

11.2 Staff Training

- (1) All operators of the Site shall be trained with respect to the following:
 - a. relevant air, noise, wastewater and waste management legislation, regulations and guidelines;
 - b. major environmental concerns pertaining to the waste to be handled at the Site;
 - c. occupational health and safety concerns pertaining to the processes and wastes to be handled at the Site;
 - d. management procedures including the use and operation of equipment for the processes and wastes to be handled at the Site;
 - e. records keeping procedures;
 - f. contingency plan and emergency response procedures;
 - g. specific written procedures for the control of adverse effects from the Site;
 - h. specific written procedures for refusal of unacceptable incoming Organic Waste loads; and
 - i. the requirements of this Approval.
- (2) The training of the operators of the Site shall also include the procedures contained in the Operations Manual.
- (3) The training of the operators of the Site shall be undertaken:

- a. upon commencing employment at the Site;
- b. whenever procedures are updated.

12.0 CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN

Anaerobic Digestion Facility

- (1) A minimum of three (3) months prior to the first receipt of the Organic Waste at the Site, the Owner shall prepare a Contingency Measures and Emergency Situation Response Plan. The Contingency Measures and Emergency Situation Response Plan shall be prepared in consultation with the District Manager, the local Municipality and the Fire Department. The Contingency Measures and Emergency Situation Response Plan, as a minimum, shall include the following information:
 - a. emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire, explosion or any other emergency situation, including specific clean-up methods for wastes expected to be generated from the emergency situation;
 - b. odour abatement plan to propose the design and operation of the contingency measures necessary to alleviate impacts from odours emitted from the waste management activities at the Site;
 - c. dust abatement plan to propose the design and operation of the contingency measure to alleviate impacts from dust originating from the waste management and vehicular activities at the Site;
 - d. trigger mechanism for implementation of the abatement plans required by b. and c, above;
 - e. a list of equipment and clean up materials available for dealing with the emergency situations;
 - f. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Site, the Ministry's District Office and Spills Action Centre, the local Fire Department, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response;
 - g. procedures and actions to be taken should the incoming Organic Waste not meet the quality criteria specified by this Approval and requires removal from the Site as set out in this Approval;
 - h. procedures and actions to be taken should the outgoing Residual Waste not meet the quality criteria set out in the receiving site's Environmental Compliance Approval;
 - i. procedures and actions to be taken should the Digestate fail to meet the requirements under

the NMA;

- j. procedures and actions to be taken should the Digestate fail to meet the requirements of a Fertilizer; and
 - k. procedures and actions to be taken should the occurrence of the substantiated complaints require the Owner to suspend the Organic Waste processing activities at the Site.
- (2) An up-to-date version of the Contingency Measures and Emergency Situation Response Plan shall be kept at the Site at all times, in a central location available to all staff, and a copy shall be submitted to the District Manager, the local Municipality and the Fire Department, if requested.
- (3) The Contingency Measures and Emergency Situation Response Plan shall be reviewed on an annual basis and updated, if necessary. The revised version of the Contingency Measures and Emergency Situation Response Plan shall be submitted to the District Manager, the local Municipality and the Fire Department for comments and concurrence.

Transfer Facility

- (4) If not already prepared, within thirty (30) days from this Approval, the Owner shall prepare a Contingency Measures and Emergency Situation Response Plan, to handle the emergency situations occurring at the Transfer Facility.
- (5) The Contingency Measures and Emergency Situation Response Plan for the Transfer Facility shall include the information required in Conditions 12.0(1), 12.0(2) and 12.0(3), as appropriate.

13.0 EMERGENCY SITUATIONS RESPONSE and REPORTING

- (1) The Owner shall immediately take all necessary measures, as outlined in the Contingency Measures and Emergency Situation Response Plan, to handle the emergency situations occurring at the Site.
- (2) The Owner shall ensure that the equipment and materials outlined in the Contingency Measures and Emergency Situation Response Plan are immediately available at the Site at all times and are in a good state of repair and fully operational.
- (3) The Owner shall ensure that all Site personnel are fully trained in the use of the equipment and materials outlined in the Contingency Measures and Emergency Situation Response Plan, and in the procedures to be employed in the event of an emergency.
- (4) All Spills shall be immediately reported to the **Ministry's Spills Action Centre at 1-800-268-6060** and shall be recorded in the log book as to the nature and cause of the Spill, and the action taken for clean-up, correction and prevention of similar future occurrences.
- (5) Should a Spill occur at the Site, in addition to fulfilling the requirements from the EPA, the

Owner shall submit to the District Manager a written report within three (3) calendar days outlining the nature of the Spill, remedial measure taken and the measures taken to prevent future occurrences at the Site.

14.0 RECORDS KEEPING and RETENTION

14.1 Daily Activities

(1) The Owner shall maintain an on-site written or digital record of activities undertaken at the Site. All measurements shall be recorded in consistent metric units of measurement. The record shall include, as a minimum, the following:

a. Anaerobic Digestion Facility

- i. date of record;
- ii. quantity and type of the Organic Waste received at the Site, including the incoming Organic Waste characterization results, or published characterization data, as applicable;
- iii. quantity and type of waste processed at the Site, including the waste inputted into the Anaerobic Digesters;
- iv. quantity and type of waste present at the Site, including the Organic Waste in-storage and in-process;
- v. amount of the Digestate shipped from the Site, its categorization and destination;
- vi. quantity of the Residual Waste shipped for final disposal, the name of the receiving site and its Environmental Compliance Approval number;
- vii. quantity and type of any Rejected Waste rejected from the Site;
- viii. housekeeping activities, including litter collection, washing/cleaning activities, etc.
- ix. date and the quantity of Biogas generated at the Site;
- x. date and the quantity of Renewable Natural Gas transferred from the Site to the natural gas distribution infrastructure;
- xi. date and duration of the flare being used for Biogas flaring.

b. Transfer Facility

- i. quantity and type of the non-Organic Waste received;
 - ii. type and amount of the non-Organic Waste processed at the Transfer Facility and its off-Site destination; and
 - iii. type and amount of the non-Organic Waste processed at the Transfer Facility and its off-Site destination.
- (2) The Owner shall retain all records retaining to waste characterization required by this Approval for a minimum of five (5) years.

14.2 Emergency Situations

- (1) The Owner shall maintain an on-Site written or digital record of the emergency situations. The record shall include, as a minimum, the following:
- a. the type of an emergency situation;
 - b. description of how the emergency situation was handled;
 - c. the type and amount of material spilled, if applicable;
 - d. a description of how the material was cleaned up and stored, if generated; and
 - e. the location and time of final disposal, if applicable.

14.3 Inspections

- (1) The Owner shall maintain an on-Site written or digital record of inspections as required by this Approval. The record shall include, as a minimum, the following:
- a. the name and signature of person that conducted the inspection;
 - b. the date and time of the inspection;
 - c. the list of any deficiencies discovered;
 - d. the recommendations for remedial action; and
 - e. the date, time and description of actions taken.

14.4 Training

- (1) The Owner shall maintain an on-Site written or digital record of training as required by this

Approval. The record shall include, as a minimum, the following:

- a. date of training;
- b. name and signature of person who has been trained; and
- c. description of the training provided.

14.5 Sampling and Testing

- (1) The Owner shall establish and maintain a written or digital record of all sampling and testing activities at the Site. This record shall include, as a minimum, the following information:
 - a. waste sampled, sample collection locations and volume collected;
 - b. day and time of collection;
 - c. sample handling procedures;
 - d. parameters tested for and the resulting concentrations;
 - e. name of the laboratory facility conducting the testing; and
 - f. conclusions drawn with respect to the results of the monitoring and testing.

14.6 Monitoring

- (1) The Owner shall establish and maintain a written or digital record of all monitoring activities at the Site as required by this Approval.

14.7 Complaints Management

- (1) The Owner shall establish and maintain a written or digital record of complaints received and the responses made as required by this Approval.

14.8 Annual Report

- (1) By November 30th following the end of each operating year, the Owner shall prepare and submit to the District Manager an Annual Report summarizing the operation of the Site covering the previous calendar year. This Annual Report shall include, as a minimum, the following information:
 - a. for the Anaerobic Digestion Facility
 - i. a monthly summary of the quality and the quantity of all incoming Organic Waste and

- outgoing Digestate, Residual Waste and Rejected Waste, including analytical data required to characterize the waste;
- ii. material balance for each month documenting the amount of Organic Waste stored at the Site;
 - iii. a monthly summary of the quality and the quantity of the Digestate pumped to the Digestate Storage Tank;
 - iv. a monthly summary of the quality and the quantity of the Digestate shipped from the Site and its end-use designation (ie. Fertilizer or a non-exempted waste) and its final end-use destination (ie. agricultural or non-agricultural location) and address;
 - v. annual amount of Biogas produced at the Site;
 - vi. annual amount of Renewable Natural Gas transferred from the Site to the natural gas distribution infrastructure;
 - vii. annual duration of the flare being used for Biogas flaring;
- b. for the Transfer Facility
- i. quantity and type of the non-Organic Waste received;
 - ii. type and amount of the non-Organic Waste processed at the Transfer Facility and its off-Site destination; and
 - iii. type and amount of the non-Organic Waste processed at the Transfer Facility and its off-Site destination.
- c. any environmental and operational problems, that could negatively impact the environment, encountered during the operation of the Site or during Site inspections and any mitigative actions taken;
- d. any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operation and monitoring programs in this regard;
- e. a summary of any complaints received and the responses made;
- f. a summary of any emergency situations, including use of over/under pressure relief valves, that have occurred at the Site and how they were handled;
- g. an update on the amount of Financial Assurance which has been provided to the Director;

- h. a summary of all inspections and maintenance carried out at the Site;
- i. summary of the PCL activities, if the PLC has been active in the previous year;
- j. a written statement that the Site was in compliance with the Approval; and
- k. any other information the District Manager requires from time to time.

15.0 CLOSURE

- (1) The Owner shall submit, for approval by the Director, a written Closure Plan four (4) months prior to the permanent closure of the Site. This plan must include, as a minimum, a description of the work that will be done to facilitate closure of the Site and a schedule for completion of that work.
- (2) Within ten (10) days after closure of the Site, the Owner must notify the Director, in writing, that the Site is closed and that the Closure Plan has been implemented.

16.0 PUBLIC LIAISON COMMITTEE

- (1) Upon request from the District Manager, the Owner shall establish and maintain a Public Liaison Committee (PLC) for the Site.
- (2) The PLC shall serve as a forum for dissemination, consultation, review and exchange of information regarding the operation of the Site, including environmental monitoring, maintenance and complaint/public concerns resolution. In addition, the PLC will also be provided the opportunity to review and comment on any subsequent applications for new approvals or amendments to the existing approvals, under the EPA, for the Site.
- (3) The Owner shall invite representation from the following groups to participate on the PLC:
 - a. home owners and the businesses within 2,000 metres of the Site;
 - b. Sensitive Receptors within 2,000 metres of the Site;
 - c. any interested non-governmental organizations; and
 - d. any other interested person(s) or group(s).
- (4) If there is no interest from the groups listed in Condition 16.1(3) in establishing and participating in a new PLC or in participating in the existing PLC, the existing PLC may be suspended upon consent of the District Manager.
- (5) If the PLC is not established or is suspended, the Owner shall review the need for a PLC on an annual basis.

17.0 PUBLIC ACCESS to DOCUMENTATION

- (1) At all times, the Owner shall keep at the Site,
 - a. the documentation that describes the current operations of the Site; and
 - b. the documentation to be prepared and kept at the Site or to be prepared and submitted to the Ministry for review, as required by the Environmental Compliance Approvals for the Site.
- (2) The Owner shall create a website for the Site and shall post the documentation listed in Condition 17.0(1) on the website. The website shall be kept up-to date at all times.
- (3) During regular business hours, the Owner shall make the documents listed in Condition 17.0(1) available for inspection at the Site by any interested member of the public.
- (4) Any information disclosure to the public shall be in accordance with the provisions of the *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, C. F-31.

Schedule "A"

1. Application for Environmental Compliance Approval dated January 23, 2020 signed by Richard Weldon, RIC (1515 Thornton) Inc., including the following attachments:
 - a. Letter dated January 31, 2020 from Daniel Turner, GHD
 - b. Document entitled "Evergreen Oshawa Anaerobic Digestion Facility Design and Operations Report Evergreen Environmental Inc.pdf" dated January 31, 2020;
 - c. Document entitled "Details of MECP Pre-Consultation.pdf".
2. E-mail dated February 20, 2020 (2:48 p.m.) from Daniel Turner, GHD, to Ricki Allum, Ontario Ministry of the Environment, Conservation and Parks, including the attachment entitled "11194552-Allum-1-Additional Information Request for Application for Approval of Waste Disposal Sites Notice to ECA No. A680066.pdf".
3. Letter dated March 5, 2020 from Daniel Turner, GHD, to Ricki Allum, Ontario Ministry of the Environment, Conservation and Parks, with the additional information on the proposal.
4. Letter dated August 14, 2020 from Tej Gidda and Aaron Baechler, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including the Attachments A through J with additional supporting information on the proposal.
5. Letter dated December 21, 2020 from Dan Turner, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including the Attachments 1 through 5 with additional supporting information on the proposal and the revised "Evergreen Oshawa Anaerobic Digestion Facility Design and Operations Report Evergreen Environmental Inc.pdf" dated December 21, 2020.
6. Letter dated May 20, 2021 from Daniel Turner, GHD, to Margaret Wojcik, Ontario Ministry of

the Environment, Conservation and Parks, including the Attachments 1 and 2 with additional supporting information on the proposal.

7. Letter dated June 11, 2021 from Daniel Turner, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including the Attachment A with additional supporting information on the proposal.
8. Letter dated July 29, 2021 from Daniel Turner, GHD to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including the Attachments A and B with additional supporting information on the proposal.
9. E-mail from September 21, 2021 (11:41 p.m.) Daniel Turner, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including the attachment entitled "RIC (Evergreen) dr waste ECA v.2021-9-14 proponent Review.pdf" containing draft Environmental Compliance Approval comments and addition supporting information on the proposal.
10. E-mail from October 1, 2021 (3:31 p.m.) Daniel Turner, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including the attachment entitled "RIC (Evergreen) dr waste ECA v.2021-10-01 Proponent Review.pdf" containing draft Environmental Compliance Approval comments and addition supporting information on the proposal.

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

GENERAL

Conditions 1.1, 1.4, 1.5, 1.6 and 1.9 are included to clarify the legal rights and responsibilities of the Owner.

Conditions 1.2 and 1.3 are included to ensure that the Site is build and 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.

Conditions 1.2(4) through 1.2(9) are also included to limit and define the Operating Envelope approved under this Approval and to set out the circumstances in which the Owner must request approval of any construction, alteration, extension or replacement of any structure, equipment, apparatus, mechanism, thing, or alteration of a process rate at the Site outside of the approved Operating Envelope for the Site.

Conditions 1.7(1) and 1.7(2) are included to ensure that the Site is operated under the corporate names which appear on the application form submitted for this approval and to ensure that the Director is informed of any changes. Condition 1.7(3) is included to restrict potential transfer or encumbrance of the Site without the approval of the Director and to ensure that any transfer of encumbrance can be made only on the basis that it will not endanger compliance with this Approval.

Condition 1.8 is included to ensure that the appropriate Ministry staff has ready access to the operations

of the Site which are approved under this Approval. The Condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA, the OWRA, the PA, the NMA and the SDWA.

Condition 1.10 is included to ensure that sufficient funds are available to the Ministry to clean up the Site in the event that the Owner is unable or unwilling to do so.

Condition 1.11 is included, pursuant to subsection 197(1) of the EPA, to provide that any persons having an interest in the Site are aware that the land has been approved and used for the purposes of waste disposal.

SIGNS and SITE SECURITY

Condition 2.0 is included to ensure that the Site's users, operators and the public are fully aware of important information and restrictions related to the operation of the Site. Condition 2.2 is also included to ensure that the Site is sufficiently secured, supervised and operated by properly Trained Personnel and to ensure controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no Site personnel is on duty.

SERVICE AREA, APPROVED WASTE TYPES and RATES

Condition 3.1 is included to specify the approved Waste types and the service area from which the Waste may be accepted at the Site based on the Owner's application and supporting documentation.

Condition 3.1 is included to prohibit some waste types from being processed at the Site since they are inappropriate to be included in the Anaerobic Digestion process or due to concerns about the quality of the Digestate or the Clean-Out Material.

Condition 3.3 is included to specify the approved Waste receipt rate based on the Owner's application and supporting documentation.

SITE OPERATIONS

Condition 4.1 is included to specify the hours of operation for the Site to ensure that the hours of Site's operation do not result in an Adverse Effect or a hazard to the natural environment or any person.

Condition 4.2 is included to ensure that only the approved the Waste types are accepted and handled/processed at the Site.

Condition 4.3 is included to ensure that the Rejected Waste storage and management are undertaken in a way which does not result in an Adverse Effect or a hazard to the environment or any person and are 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.

Condition 4.4 is included to specify the approved waste storage limits and the areas that the Waste may be stored at the Site, based on the Owner's application and supporting documentation.

Condition 4.5 is included to set out the waste management activities approved under this Approval at the Anaerobic Digestion Facility as proposed in the application and supporting documentation submitted by the Owner, and as considered by the Director.

Condition 4.6 is included to set out the waste management activities approved under this Approval at the Transfer Facility as proposed in the application and supporting documentation submitted by the Owner, and as considered by the Director.

Condition 4.7 is included to set out the Rejected Waste management activities approved under this Approval at the Site as proposed in the application and supporting documentation submitted by the Owner, and as considered by the Director.

Condition 4.8 is included to set out the Rejected Waste management activities approved under this Approval at the Site as proposed in the application and supporting documentation submitted by the Owner, and as considered by the Director.

Conditions 4.9 through 4.16 are included to ensure that management of the approved Wastes and of wastewater resulting from the waste management activities, are undertaken in a way which does not result in an Adverse Effect or a hazard to the environment or any person and is 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.

Condition 4.18 is included to list the prohibitions applicable to the operation of the Site since the activities were not a part of the Owner's application and were not considered by the Director.

EQUIPMENT and SITE INSPECTIONS and MAINTENANCE

Condition 5.0 is included to require the Waste and Biogas management areas, including the Waste and Biogas processing equipment, to be inspected and the Waste and Biogas processing equipment be maintained thoroughly and on a regular basis to ensure that the operations at the Site are undertaken in a manner which does not result in an Adverse Effect or a hazard to the health and safety of the environment or any person.

WASTE QUALITY CRITERIA

Condition 6.1 is included to identify the parameters to be tested to ensure that the incoming Organic Waste feedstocks are appropriate for anaerobic digestion approved under this Approval.

Condition 6.2 is included to identify the parameters to be tested for when the Digestate or the Clean-Out Material is destined for land application following the processing at the Site.

Condition 6.3 is included to identify the Renewable Natural Gas quality criteria required by the owner and the operator of the natural gas distribution infrastructure.

TESTING and MONITORING

Condition 7.1 is included to ensure that the Owner regularly tests the Organic Waste received for processing at the Site to verify its compatibility with the proposed processing and the proposed final end-use of the Digestate.

Conditions 7.2 and 7.3 are included to require the Owner to establish the operating parameters for Anaerobic Digestion other than the process that was initially commissioned at the Site.

Condition 7.4 is included to ensure that the Owner regularly tests the Digestate produced at the Site to verify its compatibility with the proposed final end-use.

Condition 7.5 is included to ensure that the Owner regularly tests the Clean-Out Material generated at the Site to verify its compatibility with the proposed final end-use.

Condition 7.6 is included to specify the process monitoring parameters required for a properly functioning operation as per the consensus in the industry and the Ministry's requirements.

Condition 7.7 is included to require the Biogas upgrading process monitoring required for a properly functioning operation as per the consensus in the industry and the Ministry's requirements.

END-USE of OUTPUTS

Condition 8.0 is included to set out the approved proposed final end-uses of the outputs from the Waste processing at the Site, as proposed in the application and supporting documentation submitted by the Owner and considered by the Director.

NUISANCE IMPACT CONTROL and HOUSEKEEPING

Conditions 9.0 and 4.17 are included to ensure that management of the approved Wastes and of wastewater resulting from the waste management activities, are undertaken in a way which does not result in an Adverse Effect or a hazard to the environment or any person and is 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.

COMPLAINT MANAGEMENT

Condition 10.0 is included to require the Owner to respond to any environmental complaints resulting from the operations at the Site appropriately and in a timely manner and that appropriate actions are taken to prevent any further incidents that may cause complaints in the future.

OPERATIONS MANUAL and STAFF TRAINING

Condition 11.0 is included to ensure that personnel employed at the Site are fully aware and properly trained on the requirements and restrictions related to Site operations under this Approval.

CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN

Condition 12.0 is included to ensure that the Owner is prepared and properly equipped to take action in the event of an emergency situation.

EMERGENCY SITUATIONS RESPONSE and REPORTING

Condition 13.0 is included to require further spill notification to the Ministry, in addition to the requirements already listed in Part X of the EPA.

RECORDS KEEPING and RETENTION

Condition 14.0 is included to ensure that detailed records of the Waste, including the Biogas, management activities, inspections, monitoring and upsets are recorded and maintained for inspection and information purposes.

CLOSURE

Condition 15.0 is included to ensure that final closure of the Site is completed in accordance with Ministry's standards.

PUBLIC LIAISON COMMITTEE

Condition 16.0 is included to require the Owner is to establish a forum for the exchange of information and public dialogue on activities carried out at the Site. Open communication with the public and local authorities is important in helping to maintain high standards for Site operation and environmental protection.

PUBLIC ACCESS to DOCUMENTATION

Condition 17.0 is included to ensure that the public has access to information on the operation of the Site in order to participate in the activities of the PLC in a meaningful and effective way.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A680066, A680110 issued on October 24, 1994, April 18, 1996, as amended.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. 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 Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <https://ero.ontario.ca/>, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 27th day of October, 2021



Mohsen Keyvani, P.Eng.

Director

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

MW/

c: District Manager, MECP York-Durham
Aaron Baechler, GHD



AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 4573-BR6G22
Issue Date: October 27, 2021

RIC (1515 Thornton) Inc.
162 Cumberland St, No. 300
Toronto, Ontario
M5R 3N5

Site Location: 1515 Thornton Road North
Part of Lot 16, Concession 4
Oshawa City, Regional Municipality of Durham

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

the replacement, establishment, use and operation of stormwater management Works for the collection, transmission, treatment and disposal of stormwater runoff from an organic waste processing facility with catchment area of 6.60 hectares, to provide Enhanced level water quality protection and to attenuate post-development peak flows to pre-development levels for all storm events up to and including the 100-year return storm, discharging to Goodman Creek, consisting of the following:

Proposed Works:

- Replacement of the existing storm sewer system with a new storm sewer system comprised of catchbasins and sewers ranging in diameter from 250 mm to 975 mm throughout the site, discharging to the oil and grit separator described below;
- One (1) new overland flow swale running along the northern property line (4.30 ha catchment area with 90% imperviousness), with approximately a 5.7 m bottom width, minimum depth of 0.25 m, 3:1 side slopes and a 2.2% longitudinal slope, discharging to the permanent pool of the stormwater management pond described below via a trapezoidal weir with approximately an 9.7 m bottom width, 0.25 m height and 11.7 m top width;
- Five (5) bioretention cells, each cell having a surface ponding depth of up to 0.05 metres, comprised of a 300 mm deep 25 mm clear stone layer and a 300-900 mm deep 50 mm clear stone

layer wrapped in Terrafix 270R filter cloth, providing a minimum total storage volume of 83.9 m³ for the infiltration of up to the first 15 mm of runoff, discharging overflow to the nearest on-site catchbasin, having the following minimum dimensions:

- Cell 1a is approximately 6.8 m x 4.6 m x 1.1 m deep and cell 1b is approximately 2.6 m x 3.0 m x 1.1 m deep, collecting runoff from the car parking lot (0.11 ha catchment area with 100% imperviousness);
- Cell 2 is approximately 12.1 m x 4.0 m x 1.2 m deep and collects runoff from the car parking lot (0.15 ha catchment area with 100% imperviousness);
- Cell 3 is approximately 7.0 m x 10.7 m x 0.6 m deep and collects runoff from the car parking lot (0.16 ha catchment area with 100% imperviousness);
- Cell 4a is approximately 15.75 m x 4.25 m x 0.6 m deep and cell 4b is approximately 5.0 m x 1.75 m x 0.6 m deep, collecting runoff from the area between the Sludge/Digestion Drying Equipment Building and Biogas Treatment Equipment Building and the adjacent land's green area (a 0.17 ha catchment area with 100% imperviousness);
- Cell 5 is approximately 28.5 m x 0.6 m x 1.1 m deep and collects runoff from the biofilter (0.05 ha catchment area with 100% imperviousness);
- Three (3) infiltration galleries, comprised of 50 mm clear stone wrapped in Terrafix 270R filter cloth, providing a minimum total storage volume of 73 m³ for the infiltration of the first 15 mm of runoff, discharging overflow to the nearest on-site catchbasin via overflow pipes, having the following minimum dimensions:
 - Gallery 1 is approximately 14.2 m x 12.5 m x 0.4 m deep with a 250 mm overflow pipe and collects runoff from the north side of the organic processing and waste transfer building (0.19 ha catchment area with 100% imperviousness);
 - Gallery 2 is approximately 7.0 m x 9.8 m x 0.45 m deep with a 250 mm overflow pipe and collects runoff from the northeast side of the organic processing and waste transfer building (0.08 ha catchment area with 100% imperviousness);
 - Gallery 3 is approximately 28.0 m x 4.6 m x 0.65 m deep with a 375 mm overflow pipe and collects runoff from the south side of the organic processing and waste transfer building and adjacent laneway area (0.22 ha catchment area with 100% imperviousness);
- One (1) spill containment facility with a total storage volume of approximately 9,083 m³, a total surface area of approximately 5,812 m², a maximum depth of 2.25 m from the top berm elevation of 143.55 m, an impermeable geosynthetic clay liner (Bentofix), and an outlet structure consisting of a 31.5 m x 1.0 m trench drain with a 525 mm outlet pipe with a valve in a normally closed position and an emergency overflow weir with a 13.1 m width and a 0.1 m height at an invert elevation of 143.55 m, designed to contain emergency spills from approximately fifteen (15)

waste processing tanks, discharging to the stormwater management pond described below;

- one (1) oil and grit separator (catchment area 5.98 hectares), model Stormceptor EFO-10 or Equivalent Equipment, located at the northeast corner of the site, providing Normal Level of protection, having a sediment storage capacity of 17,790 litres, an oil storage capacity of 1,670 litres, a total storage volume of approximately 19,460 litres and a maximum treatment rate of 65 litres per second, receiving inflow from the storm sewers system described above, discharging to the forebay of the stormwater management pond described below via a 1,200 millimetre diameter outlet pipe;
- Replacement of the existing stormwater management pond with one (1) wet pond (5.98 ha catchment area with 90% imperviousness), located at the southeast corner of the site, having an impermeable geosynthetic clay liner (Bentofix), an approximately 12.6 m long x 1.25 m deep sediment forebay, a 1,248 m³ permanent pool at an elevation of 138.45 m, a 1,374 m³ extended detention active pool at an elevation of 139.3 m and a 7,189 m³ total storage volume at an elevation of 141.35 m (2,565 m³ is for secondary spill containment), complete with a 300 mm outlet pipe for maintenance (invert elevation of 137.55 m) and an outlet control structure consisting of 300 mm reverse slope pipe with a 75 mm orifice (centre elevation of 138.32 m), a 375 mm outlet pipe (invert elevation of 139.95 m) with a 75 mm orifice (centre elevation 138.50 m), a 450 mm outlet pipe (invert elevation of 140.15 m) with a 180 mm orifice (centre elevation of 138.20 m) and an emergency shutoff valve in a normally open position, discharging a maximum of 139 L/s under the 100-year storm event to Goodman Creek via the existing 750 mm storm sewer outfall and outfall channel;
- One (1) concrete spill containment trench, located at the organic processing building's outdoor liquid waste unloading area, connected to a 4,380 L underground storage tank equipped with a float-activated sump pump rated at 360 L/min, discharging into the site's wastewater treatment system;

Existing Works:

- Onsite storm sewers having diameters 250mm, 300mm, 450mm, 600mm, 750mm and 900mm, three (3) infiltration trenches, catch basins, manholes and associated appurtenances, collecting storm run off from a one year design storm over the site (excluding the areas designated for "Grinding, Amendment Storage and Curing") and discharging to Goodman Creek, via an extended detention pond located on the southeast corner of the property,
- an extended detention pond, consisting of a Sediment Forebay and a detention pond, attenuating run off from a 25mm rainfall event (first flush) over a drainage area of approximately 5.03 ha and discharging to the Goodman Creek via a control outlet,
 - Sediment Forebay: a Sediment Forebay collecting storm run off from a diversion manhole via a 900mm diameter inlet sewer and complete with a head wall and a rip-rap,
 - Wetpond: an extended detention pond providing a total storage volume of 1045 m³ and

discharging via a perforated riser pipe equipped with an upturned "T" drain containing a 75mm diameter orifice plate, a sluice gate, including a 34m-300mm diameter outlet pipe and a 3m overflow spillway,

- together with approximately 70m-750mm diameter bypass sewer from the diversion manhole, concrete head wall, approximately 26m long rip-rap channel connecting the Goodman Creek;

including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Works;

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

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

1. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
2. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
3. "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;
4. "District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;
5. "EPA" means the *Environmental Protection Act* , R.S.O. 1990, c.E.19;
6. "Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment
7. "Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P.28;
8. "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;
9. "Operating Authority" means the Owner, person or the entity that is authorized by the Owner for the management, operation, maintenance, or alteration of the Works in accordance with this Approval;
10. "Owner" means any person that is responsible for the establishment or operation of the Works being approved by this Approval, and includes Owner's Legal Name and its successors and assigns;
11. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40;

12. "Works" means the sewage works described in the Owner's application, and this Approval.

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

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
4. 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 sewage 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. EXPIRY OF APPROVAL

1. This Approval will cease to apply if the approved Works as described in this Approval have not been constructed within five (5) years of the date of this Approval.

3. CHANGE OF OWNER AND OPERATING AUTHORITY

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 address of Owner;
 - b. change of Owner, including address of new 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. B.17* , as amended, shall be

included in the notification;

- 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. C.39* , as amended, shall be included in the notification.
2. The Owner shall notify the District Manager, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of Operating Authority;
 - b. change of Operating Authority, including address of new Operating Authority.
 3. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the District Manager.
 4. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

4. CONSTRUCTION

1. Upon construction of the Works, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff.
2. Within six (6) months of the construction of the Works, a set of as-built drawings showing the Works "as constructed" shall be prepared. These drawings shall be kept up to date through revision undertaken from time to time and a copy shall be retained for the operational life of the Works.

5. MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the Works, carry out the following monitoring program:
 - a. 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.
 - b. Samples shall be collected and analyzed at the sampling point(s), sampling frequencies and sample type specified for each parameter listed in the effluent monitoring table in Schedule B.
 - c. The methods and protocols for sampling, analysis and recording shall conform to the methods and protocols specified in the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02 and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District

Manager.

2. 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.

6. EFFLUENT TRIGGERS

1. The Owner shall compare the monitoring results with the corresponding trigger level of each parameter listed in Schedule C to identify any contamination of stormwater.
2. In the event of an exceedance of a trigger level for any of the parameters in condition 6.1, the Owner shall:
 - a. notify the District Manager as soon as possible during normal working hours;
 - b. immediately conduct an inspection to determine the source of the contaminant;
 - c. take remedial action to prevent further exceedances; and
 - d. submit to the District Manager for review, the results of the inspection and the remedial actions taken or planned to be taken, within one (1) week of receipt of the analytical results with the exceedance.

7. OPERATION AND MAINTENANCE

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, health or flooding hazard to the general public.
2. The Owner shall prepare an operations manual prior to the commencement of operation of the Works, that includes, but is not necessarily limited to, the following information:
 - a. operating procedures for 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. an emergency response plan for the Works to handle emergency situations such as a structural, mechanical failure, or an unforeseen flow condition; and
 - f. procedures for receiving, responding and recording public complaints, including recording any

followup actions taken.

3. The Owner shall maintain the operations manual up-to-date and retain a copy at the location of the Works for as long as they are in operation. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.
4. The Owner shall design and undertake everything practicable to ensure that the effluent from the stormwater management pond 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.
5. The Owner shall undertake an inspection of the condition of the Works, at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, oil, debris and excessive decaying vegetation are removed from the Works to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the Works, as applicable. The Owner shall also regularly inspect and clean out the inlet to and outlet from the Works to ensure that these are not obstructed.
6. The Owner shall ensure that the design minimum liquid retention volume(s) is maintained at all times.
7. The Owner shall ensure that the stormwater management pond's automated emergency outlet valve to Goodman Creek is closed prior to receiving a spill from the spill containment facility.
8. In the event that the stormwater management pond receives a spill, the Owner shall ensure that the contents of the stormwater management pond are disposed of in the site's wastewater treatment plant or hauled off-site for disposal at an approved wastewater treatment plant.
9. The Owner shall maintain the spill containment facility discharge outlet valve to the stormwater management pond in a closed position during normal operation periods.
10. Prior to any planned discharge of stormwater from the spill containment facility to the stormwater management pond, the Owner shall visually inspect the stormwater in the spill containment facility to confirm that it 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, before allowing the discharge of stormwater from the spill containment facility.
11. In the event that the stormwater in the spill containment facility is considered to be contaminated under condition 7.10, the Owner shall:
 1. ensure that the contents of the spill containment facility are disposed of in the site's wastewater treatment plant or hauled off-site for disposal at an approved wastewater treatment plant;
 2. immediately conduct an inspection to determine the source of the contaminant;

3. take remedial action to prevent further exceedances; and
 4. submit to the District Manager for review, the results of the inspection and the remedial actions taken or planned to be taken, within one (1) week of receipt of the analytical results with the exceedance.
12. The Owner shall ensure the immediate inspection of the Works after a spill, and, if necessary, clean and maintain the Works to prevent the discharge of contaminants and the excessive buildup of oil.
 13. Discharge of spills from the Works to the receiving surface water is prohibited, except where it is necessary to avoid loss of life, personal injury, danger to public health or severe property damage.
 14. The Owner shall ensure that the vehicles transporting waste do not leak waste on-site.
 15. The Owner shall ensure that stormwater does not contact waste at any time.
 16. The Approval is based on an average imperviousness of 80% for approximately 6.60 ha drainage area. Any future development changes within the total drainage area that might increase the required storage volumes or increase the flows to or from the wet pond or any structural/physical changes to the stormwater management facility including inlets or outlets will require an amendment to this Approval
 17. The Owner shall maintain a record of the results of the inspections, cleaning and maintenance operations undertaken, and shall keep the record at the Owner's office for inspection by the Ministry. The record shall include the following:
 - a. the name of the Works;
 - b. the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and
 - c. the date of each spill within the catchment area, including follow-up actions / remedial measures undertaken.

8. TEMPORARY EROSION AND SEDIMENT CONTROL

1. The Owner shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections once every two (2) weeks and after each significant storm event (a significant storm event is defined as a minimum of 25 mm of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control measures shall continue until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly.
2. The Owner shall maintain records of inspections and maintenance which shall be made available for inspection by the Ministry, upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures, if any, undertaken to maintain the temporary sediment and

erosion control measures.

9. REPORTING

1. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
2. In addition to the obligations under Part X of the EPA and O. Reg. 675/98 (Classification and Exemption Of Spills and Reporting of Discharges), the Owner shall, within fifteen (15) days of the occurrence of any reportable spill as provided in Part X of the EPA and Ontario Regulation 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and a schedule of implementation.
3. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager by June 30 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
 - a. a summary and interpretation of all monitoring data, including an overview of the success and adequacy of the Works;
 - b. a description of any monitoring results which indicate that contaminants may be entering the Works (e.g., exceedance of effluent triggers), including the potential sources of the contaminants and any corrective actions taken or proposed to be taken;
 - c. a description of any operating problems encountered and corrective actions taken;
 - d. a summary of all inspection, maintenance and clean-out carried out on the Works;
 - e. a summary of all spill or abnormal discharge events; and
 - f. any other information the District Manager requires.

10. SPILL CONTINGENCY PLAN

1. Within six (6) months from the issuance of this Approval, the Owner shall implement a spill contingency plan - that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the Works. The Owner shall, upon request, make this plan available to Ministry staff. This plan shall include as a minimum:
 - a. the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;
 - b. the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill

contingency plan;

- c. a site plan drawn to scale showing the facility, nearby buildings, streets, catch-basins and manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);
 - d. steps to be taken to report, contain, clean up and dispose of contaminants following a spill;
 - e. a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and Ministry Spills Action Centre 1-800-268-6060;
 - f. Safety Data Sheets (SDS) for each hazardous material which may be transported or stored within the area serviced by the Works;
 - g. the means (internal corporate procedures) by which the spill contingency plan is activated;
 - h. a description of the spill response training provided to employees assigned to work in the area serviced by the Works, the date(s) on which the training was provided and by whom;
 - i. an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and
 - j. the date on which the contingency plan was prepared and subsequently, amended.
2. The spill contingency plan shall be kept in a conspicuous, readily accessible location on-site.
 3. The spill contingency plan shall be amended from time to time as required by changes in the operation of the facility.

Schedule A

1. Environmental Compliance Approval Application for Industrial Sewage Works submitted and signed by Richard Weldon, Director of Romspen, dated January 17, 2020 and received on February 4, 2020, and all supporting documentation and information.
2. Design and Operations Report dated January 31, 2020 and revised on December 21, 2020, prepared by GHD.
3. Stormwater Management and Functional Servicing Report, prepared by D.G. Biddle & Associates Limited, dated August 2020 and last revised on July 19, 2021. This SWM report replaces the SWM report that was prepared by GHD which was included in the ECA application.
4. Field Infiltration Tests Report prepared by Fisher Engineering Ltd. dated May 20, 2021.
5. Email from Aaron Baechler, GHD, to Nick Zambito, Ministry, dated July 31, 2020,
6. Emails from Dan Turner, GHD, to Nick Zambito, Ministry, dated September 16, 2020, October 29, 2020, December 22, 2020, February 11, 2021, May 21, 2021, July 22, 2021 and including the attachments.
7. Email from David McNaull, D.G. Biddle & Associates Limited, to Nick Zambito, Ministry, dated September 17, 2020, including the stormwater management attachments.
8. Email from Dan Turner, GHD, to Alexander Shulyarenko, Ministry, dated March 1, 2021, including the attachment on the monitoring program.

Schedule B

Effluent Monitoring Table

Table 1 - Sampling and Monitoring for the Works	
Locations	<ul style="list-style-type: none">● Outlet of the stormwater management pond; and● Outlet of the spill containment facility
Frequency	Quarterly
Sample Type	Grab
Parameters	Total Suspended Solids, BOD5, Total Ammonia Nitrogen, Total Phosphorus, pH (field), Dissolved Oxygen (field), Conductivity (field), Turbidity (field), Temperature (field)

Schedule C

Effluent Triggers

Effluent Parameter	Trigger
*Total Suspended Solids	25.0 mg/L
Total Phosphorus	0.15 mg/L
BOD5	25.0 mg/L
Total Ammonia Nitrogen	2.0 mg/L

*The total suspended solid's trigger level does not apply to the spill containment facility.

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.
2. Conditions 2 and 4 are included to ensure that, when the Works are constructed, the Works will meet the standards that apply 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 approved Works and to ensure that any subsequent Owner of the Works is made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 5 is included to ensure that the effluent discharged from the Works 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.
5. Condition 6 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 specified in the Approval and that the Works do not cause any impairment to the receiving watercourse.
6. Condition 7 is included to require that the Works be properly operated and maintained such that the environment is protected and to ensure that appropriate steps are taken to address the immediate concerns or otherwise abnormal situation and minimizing environmental damage.
7. Condition 8 is included as installation, regular inspection and maintenance of the temporary sediment and erosion control measures is required to mitigate the impact on the downstream receiving watercourse during

construction until they are no longer required.

8. Condition 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.
9. Condition 10 is included to ensure that the Owner will implement the Spill Contingency Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 3-1036-98-006 issued on September 21, 1998

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. 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 Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

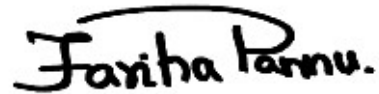
AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <https://ero.ontario.ca/>, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.
DATED AT TORONTO this 27th day of October, 2021



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

NZ/

c: District Manager, MECP York-Durham
Daniel Turner, GHD Ltd.