

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 4581-D6QQEP

Issue Date: September 23, 2024

Convertus Canada Ltd.  
307 Commissioners Rd W, No. 8  
London, Ontario  
N6J 1Y4

Site Location: 50 Garfield Wright Boulevard  
East Gwillimbury Town, Regional Municipality of York  
L0G 1V0

*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:*

an anaerobic digestion facility for the production of renewable natural gas at a maximum rate of 55,000 normalized cubic metres per day for injection into the natural gas pipeline grid, and the production of liquid digestate at a maximum rate of 548 tonnes per day for use as fertilizer, consisting of the following:

- one (1) fully enclosed Process Building, used for the receipt and processing of solid and liquid organic residual feedstock from source separated organics, and industrial, commercial and institutional sources, at a maximum rate of 2,000 tonnes per day or, 200,000 tonnes per year;
- one (1) odour control system, serving the Process Building, consisting of two (2) parallel treatment trains, each train consisting of a dust filter, an ultraviolet reactor to form ozone and radicals to remove volatile organic carbons, an activated carbon adsorption unit equipped with 15.6 cubic metres of activated carbon media, an air-heat exchanger to pre-heat fresh incoming air using residual heat from the treated exhaust air, and an extraction fan, discharging the air at a maximum volumetric total flow rate of 22.22 cubic metres per second through a common stack (ID: S01) having an exit diameter of 1.4 metres, extending 28 metres above grade, and treating the following:
  - scrubbed air from the ammonia scrubber, located in the Processing Hall and using sulphuric acid in water as the scrubbing agent, serving the digestate screening system area, pasteurization tanks, and optional emissions from the regeneration process of the temperature swing arm adsorption system, part of the Biogas Upgrading System for removal of volatile organic carbon and siloxanes from the raw biogas;
  - headspace air from the slurry storage tanks and ICI storage tanks treated by two (2) regenerative

thermal oxidizers; and

- o ventilation air from source extraction points in the Receiving Hall, Processing Hall and Air Treatment Hall;
- four (4) anaerobic digester tanks, each tank having a total volume of 6,362 cubic metres, each digester tank equipped with an internal heating system, biological sulphur removal system, and an activated carbon filtration system containing 4.5 kilograms of activated carbon media;
- two (2) digestate storage tanks, each tank having a liquid storage capacity of 6,362 cubic metres of digestate, and equipped with an activated carbon filter system containing 4.5 kilograms of activated carbon media;
- one (1) enclosed type waste gas burner, equipped with thermocouples and a continuous temperature monitoring and recording system, to combust digester gas and off-spec gas generated on site, having a maximum burning rate of 3,000 cubic metres of digester gas per hour, operating at a minimum temperature of 800 degrees Celsius and a minimum residence time of 0.3 seconds, discharging to the air at a maximum volumetric flow rate of 9.78 cubic metres per second, through a separate stack (ID: S04) having an exit diameter of 2.8 metres and extending 10 metres above grade;
- three (3) dual fuel hot water boilers - two (2) duty, and one (1) standby, firing natural gas and digester gas, each having a maximum heat input of 4,220,000 kilojoules per hour, and discharging to the air at a maximum volumetric flow rate of 0.68 cubic metre per second, through a common stack (ID: S02) having an exit diameter of 0.46 metre, extending 9 metres above grade;
- one (1) biogas management system, to treat raw biogas at a maximum rate of 2,500 normalized cubic metres per hour, discharging to the air at a maximum volumetric flow rate of 0.69 cubic metre per second through a stack (ID: S03) having an exit diameter of 0.15 metre, extending 9.4 metres above grade, and equipped with the following:
  - o a biogas pre-treatment system consisting of a cooler, booster fan, two (2) activated carbon adsorption filters to remove hydrogen sulphide, a minimum of one (1) activated carbon filter to remove volatile organic carbon, an optional temperature swing adsorption unit for removal of volatile organic carbon and siloxanes, from the raw biogas, each carbon adsorption filter equipped with 20 cubic metres of activated carbon media; and
  - o a biogas upgrading system consisting of compressors, a membrane separation system, and heat recovery;

all in accordance with the Environmental Compliance Approval Application submitted by Convertus Canada Ltd., dated July 31, 2023, and signed by David Veinot, Environmental Compliance Manager; the revised supporting Emission Summary and Dispersion Modelling Report prepared by GHD Limited, dated March 1, 2024, and signed by Matthew Griffin, P.Eng.; the revised supporting Acoustic Assessment Report prepared by GHD Limited, dated March 1, 2024, and signed by Mike Masschaele, P.Eng.; and the additional/revised information submitted by:

- Tanya Bogoslawski, P.Eng. via e-mails on February 16, 2024, July 31, 2024, August 21, 2024,

- August 23, 2024, and August 28, 2024;
- Matthew Griffin, P.Eng. via e-mail on March 1, 2024; and
  - Ryan Loveday, P.Eng., GHD Limited via email on July 26, 2024.

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

1. "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 prepared by GHD, dated March 1, 2024 and signed by Mike Masschaele;
2. "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;
3. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233;
4. "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;
5. "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, used to calculate one-hour average concentrations of a contaminant at the Point of Impingement and at the most impacted Sensitive Receptor;
6. "Anaerobic Digester" means the anaerobic digesters as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
7. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
8. "Best Management Practices for Industrial Sources of Odour" means the Ministry Publication "Best Management Practices for Industrial Sources of Odour", dated January 31, 2017, as amended;
9. "Biogas Upgrading System" means the biogas upgrading system as 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. "Company" means Convertus Canada Ltd. 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;

11. "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;
12. "Digestate" has the same meaning as defined in the Waste Approval;
13. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
14. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
15. "ESDM Report" means the Emission Summary and Dispersion Modelling Report prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by Matthew Griffin, P.Eng./GHD Limited and dated March 1, 2024 submitted in support of the application including any addendum submissions made during the Ministry's review of the Company's application;
16. "Equipment" means the equipment and processes described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
17. "Exhausted" means the capacity of the Odour Control Units to adsorb emissions is reached and the Odour Control Units are no longer able to effectively reduce emissions;
18. "Facility" means the entire operation located on the property where the Equipment is located;
19. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Acoustic Assessment Report or the design/implementation of Noise Control Measures for the Facility and/or Equipment. The Independent Acoustical Consultant shall not be retained by the Acoustical Consultant involved in the noise impact assessment or the design/implementation of Noise Control Measures for the Facility and/or Equipment;
20. "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 Process Building, excluding failures that may be caused in part by poor maintenance or negligent operation;
21. "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;
22. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;

23. "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;
24. "Noise Control Measures" means measures to reduce the noise emission from the Facility and/or Equipment including, but not limited to silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers. It also means the noise control measures outlined in section 3.4 - Mitigation Measures of the Acoustic Assessment Report;
25. "O. Reg. 419/05" means Ontario Regulation 419/05, Air Pollution - Local Air Quality, as amended;
26. "Odour Control Unit" means the odour control system serving the Process Building as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
27. "Odour Management Plan" means a document or a set of documents which describes the measures to minimize odour emissions from the Facility and/or Equipment;
28. "Organic Waste" has the same meaning as defined in the Waste Approval;
29. "Phase 1" has the same meaning as defined in the Waste Approval;
30. "Phase 2" has the same meaning as defined in the Waste Approval;
31. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
32. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
33. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report", dated March 2018, as amended;
34. "Process Building" means the fully enclosed building, consisting of the receiving hall, processing hall, and air treatment hall, located at the Site where the Organic Waste is received, temporarily stored and pre-processed, prior to transfer to the Anaerobic Digester, and also means the Process Building as defined in the Waste Approval;
35. "Professional Engineer" means a Professional Engineer as defined within the Professional Engineers Act, R.S.O., c. P.28, as amended;
36. "Publication NPC-103" means the Ministry Publication NPC-103 of the Model Municipal Noise Control By-Law, Final Report, August 1978, published by the Ministry as amended;
37. "Publication NPC-233" means the Ministry Publication NPC-233, Information To Be Submitted For Approval of Stationary Sources Of Sound, October, 1995, as amended;
38. "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;

39. "Rejected Waste" has the same meaning as defined in the Waste Approval;
40. "Residual Waste" has the same meaning as defined in the Waste Approval;
41. "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. 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.);
42. "Site" has the same meaning as defined in the Waste Approval;
43. "Source Testing" means sampling and testing to measure emissions from operating the Odour Control Units under conditions which yield the worst case emissions within the approved operating range of the Odour Control Units which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
44. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
45. "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 operation of the Equipment/Facility and procedures to be followed in the event of a process upset or an emergency situation;
46. "Waste Approval" means the Environmental Compliance Approval and any Schedules attached to it, including the application and its supporting documentation for activities set out section 27 of the EPA and carried out at the Facility; and
47. "Waste Gas Burner" means the enclosed waste gas burner as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval.

*You are hereby notified that this environmental compliance approval is issued to you subject to the terms and*

*conditions outlined below:*

## **TERMS AND CONDITIONS**

### **1. OPERATION AND MAINTENANCE**

1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
  - a. prepare, before commencement of operation of the Equipment, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:
    - i. routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
    - ii. emergency procedures, including spill clean-up procedures;
    - iii. procedures for any record keeping activities relating to operation and maintenance of the Equipment;
    - iv. all appropriate measures to minimize noise and odorous emissions from all potential sources;
    - v. procedures for monitoring the negative pressure ventilation in the fully enclosed Process Building;
    - vi. procedures for monitoring the performance of the Odour Control Units and the overall odour control system;
    - vii. the frequency of inspection and replacement of the ammonia scrubber scrubbing agent;
  - b. implement the recommendations of the Manual.

### **2. ODOUR CONTROL MEASURES**

1. The Company shall take measures to minimize odorous emissions from all potential sources at the Facility.
2. The Company shall ensure that:
  - a. the fully enclosed Process Building is designed and constructed such that the potential for air leakages from the Process Building is minimized;
  - b. the fully enclosed Process Building is maintained at a negative pressure environment, such that all potentially odorous air is collected and treated using the fully functioning Odour

Control Units;

- c. all aspects of Organic Waste receiving and pre-processing are undertaken in the fully enclosed Process Building;
- d. all Organic Waste delivered to the Facility and any Digestate, Rejected Waste and Residual Waste removed from the Facility are in covered/enclosed vehicles;
- e. any truck loading of Digestate, for shipping from the Facility, is undertaken via cam-lock connection to a truck, with any odorous air displaced from the loading of Digestate into the tank of the truck to be treated by the Odour Control Unit;
- f. the Organic Waste is processed in the approximate order of receipt;
- g. all doors in the fully enclosed Process Building are kept closed at all times, except during shipping and/or receiving, and for operational/maintenance purposes;
- h. all four (4) receiving bay doors in the fully enclosed Process Building are fast acting doors design;
- i. the four (4) receiving bay doors for organic waste truck/trailer access in the fully enclosed Process Building are fitted with air curtains to minimize the escape of odorous emissions when the bay door(s) is/are opened;
- j. only one bay door in the receiving hall, and in the processing hall shall be opened at the same time;
- k. the fully enclosed Process Building is equipped with negative pressure differential sensor(s) at locations appropriate to avoid atmospheric interference;
- l. 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 Process Building, and the opening and closing of the primary receiving bay doors are monitored through the same SCADA control system;
- m. the fan blowers associated with the ventilation system in the fully enclosed Process Building are equipped with an alarm for loss of suction, which is integrated to the SCADA control system to indicate component failure and prompt the bay doors to remain in the closed position, if the overall system cannot maintain negative pressure;
- n. the fully enclosed Process 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;
- o. the negative pressure and negative air balance for the fully enclosed Process Building are



- monitored and recorded every five (5) minutes (rolling arithmetic average over 30 minute period), utilizing negative pressure and negative air balance data every second;
- p. 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 Process Building, then the Company shall:
    - i. ensure that critical alarms are generated and promptly communicated to the Trained Personnel so that corrective action(s) can be undertaken;
    - ii. notify the District Manager within 24 hours of losing the negative pressure as compare 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
    - iii. prepare, retain a copy at the Facility and submit to the District Manager, a daily written report within one (1) week of losing 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.

### **3. ODOUR CONTROL UNIT**

1. The Company shall ensure that the media(s) in the Odour Control Unit and all other activated carbon filters at the Facility are replaced before it is Exhausted.
2. The Company shall monitor the operational parameters of the Odour Control Unit, either as specified in the manual of the Odour Control Unit manufacturer, or as deemed necessary in accordance with site operational conditions. The results of monitoring these parameters shall be recorded in a log.
3. Critical and key performance parameters of the Odour Control Unit, such as hydrogen sulphide and ammonia concentrations are being measured and logged at various points in the Odour Control Unit and Ventilation System using a procedure, and at a frequency as agreed to in writing by the District Manager. Flows, pressures and temperatures, as well as estimated odour emissions by the continuous emission monitor at the outlet towards the exhaust stack shall be continuously monitored on the SCADA control system. Any parameter deviation outside of its accepted range shall immediately generate an alarm. Critical alarms shall be promptly communicated to the Trained Personnel so that corrective action(s) can be undertaken.
4. The Company shall perform a quarterly review of the operational data of the Odour Control Unit after its successful commissioning including an analysis of parameter trends and a comparison to

the design levels.

#### **4. WASTE GAS BURNER**

1. The Company shall maintain the Waste Gas Burner system, so that in the instance of a process upset and/or when the Biogas Upgrading System is inoperable, that the waste gas burner may be utilized to burn biogas, off-spec gases and/or renewable natural gas, and as a fully functioning stand-by system.

#### **5. CONTINUOUS MONITORING**

1. The Company shall continuously monitor and record the temperature in the combustion chamber of the Waste Gas Burner when the Waste Gas Burner is in operation. The continuous temperature monitoring and recording system shall comply with the requirements outlined in Schedule "C".

#### **6. ODOUR MANAGEMENT PLAN**

1. The Company shall, at all times, take all reasonable measures to minimize odorous emissions and odour impacts from all potential sources at the Facility.
2. The Company shall submit to the District Manager, an Odour Management Plan that includes measures in place and proposed, to minimize odour impacts of the Facility buildings on nearby receptors, no later than three (3) months prior to the receipt of Organic Waste at the Facility. If the District Manager does not accept the Odour Management Plan, then the District Manager may require the Odour Management Plan to be revised and re-submitted prior to the receipt of Organic Waste at the Facility.
3. The Odour Management Plan shall include:
  - a. Facility and process descriptions including a list of all potential sources of odour and the Odour Control Units;
  - b. best management practices described in Ministry's Best Management Practices for Industrial Sources of Odour to ensure the effective implementation of the odour impact reduction measures, including:
    - i. periodic preventative activities and their frequency;
    - ii. inspection and maintenance procedures;
    - iii. monitoring initiatives; and
    - iv. record keeping practices for odour complaints and steps taken to address each complaint.

4. The Company shall:
  - a. update and revise the Odour Management Plan within three (3) months of the following:
    - i. implementation of any proposed modifications that may impact odour emissions; and
    - ii. subject to Condition 6., implementation of a Technology Benchmarking Report;
  - b. review and evaluate the Odour Management Plan for the control of odour emissions once every twelve (12) months from the date of this Approval, or at a frequency directed, or agreed to in writing by the District Manager;
  - c. record the results of each annual review and evaluation, and update the Odour Management Plan accordingly;
  - d. maintain the updated Odour Management Plan at the Facility and make it available to Ministry staff upon request; and
  - e. implement, at all times, the most recent version of the Odour Management Plan within sixty (60) days of an update.
5. The Company shall record, and retain such records, each time a specific preventative and odour impact reduction measure described in the Odour Management Plan is implemented.

## **7. TECHNOLOGY BENCHMARKING REPORT**

1. The District Manager may, at their discretion, require the Company to prepare a Technology Benchmarking Report.
2. Subject to Condition 7.1:
  - a. The Company shall submit to the Director a Technology Benchmarking Report prepared by a Licensed Engineering Practitioner to identify feasible options to reduce off-property odour impacts, no later than two (2) years after the date of this Approval.
  - b. The Technology Benchmarking Report should, at a minimum, include the following:
    - i. a comprehensive list of all control methods for odour impact reduction based on the following:
      - a comparison of methods used by other facilities in the same or similar industrial sector;
      - a review of emission control requirements and strategies from other jurisdictions; and
      - where applicable, transfer of technologies from other sectors with similar issues,

including preventative steps such as material substitutions, process changes and add-on controls or treatment methods;

- ii. an evaluation of the technical feasibility of the identified control options individually, and where applicable, control options in combination. This evaluation will include the availability and applicability of the option to the odour source, technical considerations, and any site specific considerations;
  - iii. a ranking of feasible options, or option combinations with an assessment of predicted impact reductions at sensitive receptors for major sources and aggregate facility emissions including percent contribution, maximum and average odour concentrations and frequency assessment at sensitive receptors, and compared to current operations; and
  - iv. recommendations based on current odour impact assessment, predicted reductions that can be achieved by implementing feasible options, timelines, approval requirements and other applicable considerations.
- c. The Company shall update and/or implement the recommendations of the Technology Benchmarking Report as directed by the District Manager.

## **8. VENTILATION ASSESSMENT REQUIREMENTS**

1. The Company shall develop a negative pressure assessment plan, prepared by a Professional Engineer, not later than six (6) months prior to the receipt of any Organic Waste at the Site, or as directed or agreed to in writing by the District Manager, for performing negative pressure assessment for the fully enclosed Process 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 Site and 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 and location of negative pressure monitoring sensors within the fully enclosed Process 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 Process Building, including the need to install any additional fans required to maintain the target negative pressure and negative air balance within the fully enclosed Process 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 fully enclosed Process 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 alarm is triggered;
  - j. an evaluation of the negative pressure and air balance inside the fully enclosed Process Building;
  - k. the monitoring period duration for the negative pressure assessment for the fully enclosed Process 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 Process Building, not later than three (3) months prior to the receipt of any 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 Process Building to the Director and the District Manager not later than two (2) months after completing the negative pressure assessment. 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 and indication of,
    - i. whether the ventilation system is capable of achieving and maintaining 1) at all time, 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 Process Building;
    - ii. whether the negative pressure monitoring system follows ideal methodology for data collection, monitoring and reporting of the negative pressure within the Process Building;
    - iii. whether any part of the negative pressure ventilation and monitoring system is inadequate for the purposes of odour containment within the Process Building;
  - d. recommendation including the need to install any additional fans or ducting required to maintain the target air changes per hour, negative pressure and negative air balance within the Process Building and to maintain the appropriate face-velocity on doors and entranceways.
4. The Company shall implement the recommendations identified in the negative pressure assessment report, prior to receipt of any Organic Waste at the Site, 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 Process 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.

## **9. SOURCE TESTING**

1. The Company shall perform Source Testing in accordance with Schedule "A" to determine the rate of emission of total reduced sulphur, hydrogen sulphide, and ammonia from the Odour Control Unit, as follows:
  - a. six (6) months after the completion of Phase 1 development of, and receipt of Organic Waste at the Facility, and repeated annually thereafter,
  - b. six (6) months after the completion of Phase 2 development of the Facility, and repeated

annually thereafter, or

- c. at a date and frequency as directed, or agreed to in writing by the District Manager.

## **10. RECORD RETENTION**

1. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the recording activities required by this Approval, and make these records available for review by staff of the Ministry upon request. The Company shall retain:
  - a. all records on the maintenance, repair and inspection of the Equipment; and
  - b. all records of any environmental complaints, including:
    - i. a description, time and date of each incident to which the complaint relates;
    - ii. wind direction at the time of the incident to which the complaint relates; and
    - iii. a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.

## **11. COMPLAINTS RESPONSE PROCEDURE**

1. A designated representative of the Company shall be available to receive public complaints caused by the operations at the Facility twenty-four (24) hours per day, seven (7) days per week.
2. If at any time, the Company receives any environmental complaints from the public regarding the operation of the Facility, the Company shall record respond to these complaints according to the procedure:
  - a. Step 1: Receipt of Complaint - The Company shall record each complaint in a computerized tracking system and the information recorded shall include the following:
    - i. the name, address, and the telephone number (or contact information) of the complainant, if know;
    - 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 computerized 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, the following:

- i. determination of the activities being 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 the possible cause(s) of the complaint.

c. Step 3: Corrective Action

- i. 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

- i. 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

- i. 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 10.2.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. a reduction in the receipt of the Organic Waste;
- b. cessation of the receipt of the Organic Waste;



- c. removal and off-site disposal of the Organic Waste;
  - d. repairs or modifications to the equipment or processes at the Site, 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 Process Building;
    - iii. the Company may increase the number of air exchanges in the areas suspected of causing fugitive odour emissions escaping from the Process Building; and
    - iv. the Company may retrofit the design of the ventilation system within the Process Building to provide a more effective local capture of the odours from the odour sources within the Process Building; and
  - e. further investigation of possible sources of fugitive air emissions from the Site as follows:
    - i. the Company 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 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 10. 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.
4. If at any time, the Company cannot maintain the adequate negative pressure for the Process Building, as required in Condition 2. 2. b. of this Approval; or the District Manager is of the opinion that the Facility is not being operated as approved; or the District Manager deems the corrective actions taken as per Condition 10. 2. c. of this Approval to be unsuitable, insufficient or ineffective, the District Manager may direct the Company, in writing, to take additional control measures to address the noted failure, upset or malfunction as per Condition 10. 3. a., 10. 3. b., and 10. 3. c. of this Approval.

5. If at any time, the Company cannot maintain, for the Process Building, adequate negative pressure as outlined in Condition 2. 2. b. of this Approval, the Company shall complete, retain on Facility, a daily written report within one (1) week of the losing the negative pressure, identifying all possible causes for losing the negative pressure, 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.

## **12. ANNUAL COMPLIANCE REPORT**

1. The Company shall submit to the District Manager, by March 31 of the following year, a compliance report for the first full calendar year of operations following the issuance date of this Approval, prepared by a Professional Engineer detailing:
  - a. compliance with all terms and conditions of this Approval and the EPA;
  - b. a detailed description of the measures taken to ensure compliance with all terms and conditions of this Approval and EPA;
  - c. a detailed description of:
    - i. non-compliance with any terms and conditions of this Approval and EPA and;
    - ii. how and when any non-compliance was corrected.
2. Subject to the discretion of the District Manager, the Company shall submit subsequent compliance reports to the District Manager at a date and frequency as directed, or agreed to in writing by the District Manager. The compliance report shall include, subject to the District Manager's discretion, details on:
  - a. compliance with all terms and conditions of this Approval and the EPA;
  - b. a detailed description of the measures taken to ensure compliance with all terms and conditions of this Approval and EPA;
  - c. a detailed description of:
    - i. non-compliance with any terms and conditions of this Approval and EPA and;
    - ii. how and when any non-compliance was corrected;
3. The compliance report shall be signed by a person designated by the Company.
4. The Company shall ensure that each compliance report is available electronically for inspection at the Facility by any member of the public during normal business hours without charge.

### **13. NOISE**

1. The Company shall, at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.

### **14. 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 twelve (12) months after the Facility has been fully operational.
2. The Director:
  - a. may not accept the results of the Acoustic Audit if the requirements of Publication NPC-233 were not followed;
  - b. may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

### **15. CHANGE OF OWNERSHIP**

1. The Company 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 of the following changes to Facility operations:
  - a. the ownership of the Facility;
  - b. the operator of the Facility;
  - c. the address of the Company;
  - d. the partners, where the Company is or 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, shall be included in the notification; or
  - e. the name of the corporation where the Company 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, shall be included in the notification.

2. In the event of any change in ownership of the Facility, the Company shall notify the successor of the existence of this Approval and provide the successor with a copy of this Approval, and the Company shall provide a copy of the notification to the District Manager and the Director.

## **SCHEDULE "A"**

### **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 Owner 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 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.
4. The Company shall submit a report (hardcopy and 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:
  - a. an executive summary;
  - b. an identification of the applicable North American Industry Classification System code (NAICS) for the Facility;
  - c. records of operating conditions at the time of Source Testing, including but not limited to the following:
    - i. production data and equipment operating rate as a percentage of maximum capacity;
    - ii. Facility/process information related to the operation of the Odour Control Units at the time of testing, including the quantity of the waste received, the quantity of waste in the receiving pits, volumetric flow rate to the Odour Control Units, monitored parameters of the Odour Control Units, etc.;
    - iii. description of the emission sources controlled by the Odour Control Units at the time of testing;
    - iv. records of weather conditions such as ambient temperature and relative humidity, wind speed and direction at the time of testing; and
    - v. operational description of the general building ventilation serving the fully enclosed Process

Building at the time of testing;

- d. results of Source Testing, including the emission rate, emission concentration, relevant emission factor of total reduced sulphur and odour from the Odour Control Units.
5. The Director may not accept the results of the Source Testing if:
  - a. the Source Testing Code or the requirements of the Manager were not followed;
  - b. the Company did not notify the Manager, the District Manager and Director of the Source Testing; or
  - c. the Company failed to provide a complete report on the Source Testing.
6. If the Director does not accept the results 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.
7. The Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 with the results from the Source Testing if the calculated emission rates from the Source Testing are higher than the predicted rates in the ESDM Report and make these records available for review by staff of the Ministry upon request. Dispersion calculations for the 10-minute average concentration of Odour, at the Point of Impingement and the most impacted Sensitive Receptor, shall be calculated in accordance with the procedure outlined in Schedule "B". The updated Emission Summary Table from the updated ESDM Report shall be submitted with the Source Testing report.

## **SCHEDULE "B"**

### **Procedure to calculate and record the 10-minute average concentration of odour at the Point of Impingement and at the most impacted Sensitive Receptor**

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 corresponding to 99.5% of the time in the 5 year modelling period at the most impacted Sensitive Receptor. If elimination of meteorological anomalies in accordance with the section 6.5 of the ministry's document titled "Air Dispersion Modelling Guideline for Ontario" dated February 2017, as amended is considered before considering frequency, only those anomalies per year of meteorology over the full modelling grid as required under section 14 of O. Reg. 419/05 shall be removed.

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:

$$X_{10min} = X_{60min} \times 1.65$$

where,  $X_{10min}$  is the 10-minute average concentration, and  $X_{60min}$  is the one-hour average concentration

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

## SCHEDULE "C"

### Continuous Temperature Monitoring System

**PARAMETER:**

Temperature

**LOCATION:**

The sample point for the continuous temperature monitor shall be located in the combustion chamber of the Equipment to ensure a minimum combustion temperature of 800 degrees Celsius and a minimum gas residence time of at least of 0.3 seconds is achieved.

**PERFORMANCE:**

The continuous temperature monitor shall meet the following minimum performance specifications for the following parameters:

PARAMETERS	SPECIFICATION
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 monitor without a

significant loss of accuracy and with a time resolution of 1 minute or better.

**RELIABILITY:**

The monitor 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. Condition No. 1 (OPERATION AND MAINTENANCE) 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.
2. Condition No. 2 (ODOUR CONTROL MEASURES) is included to require the Company to properly operate and maintain the Facility/Equipment to minimize the impact on the environment.
3. Conditions No. 3, 4, and 6 (ODOUR CONTROL UNITS, WASTE GAS BURNER, and ODOUR MANAGEMENT PLAN) are included to emphasize that the Facility/Equipment must be operated according to a procedure that will result in compliance with the EPA, the regulations and this Approval.
4. Condition No. 5 (CONTINUOUS MONITORING) 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.
5. Condition No. 7 (TECHNOLOGY BENCHMARKING REPORT) is included to require the Company to provide information to the ministry on the efforts of the Company in minimizing odorous emissions relative to industry best practices.
6. Conditions No. 8, 9, and 11 (VENTILATION ASSESSMENT REQUIREMENTS, SOURCE TESTING, COMPLAINTS MANAGEMENT PROCEDURE) are included to require the Company to gather accurate information so that compliance with the EPA, the regulations, and this Approval can be verified.
7. Conditions No. 10 and 12 (RECORD RETENTION, ANNUAL COMPLIANCE REPORT) are included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, the regulations and this Approval can be verified.
8. Condition No. 13 (NOISE) is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.
9. Condition No. 14 (ACOUSTIC AUDIT) is included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with this Approval can be verified

10. Condition No. 15 (CHANGE OF OWNERSHIP) is included to require the Company to notify/report to the Ministry so that compliance with the EPA, the regulations and this Approval can be verified.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land 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 ("the Notice") 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.

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:

Registrar\*  
Ontario Land Tribunal  
655 Bay Street, Suite 1500  
Toronto, Ontario  
M5G 1E5  
OLT.Registrar@ontario.ca

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 Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or [www.olt.gov.on.ca](http://www.olt.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 23rd day of September, 2024



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Nancy E Orpana, P.Eng.  
Director



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

ES/

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