

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3234-CKML66
Issue Date: August 21, 2023

H & D Properties Ltd.
10839 Van Camp Rd
Mountain, Ontario
K0E 1P0

Site Location: 1336 County Road 2
1336 County Road 2 Rd
Augusta Township, United Counties of Leeds and
Grenville

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 26,000 cubic metres per day for injection into the natural gas pipeline grid, and the production of digestate at a maximum rate of 540 tonnes per day for use as fertilizer, consisting of the following:

- one (1) fully enclosed Receiving Building, used for the receipt of organic residual feedstock from source separated organics and industrial, commercial and institutional sources, at a maximum rate of 600 tonnes per day;
- one (1) activated carbon adsorption odour control system, serving the Organics Reception Building and enclosed compactor located on the east side of the Organics Reception Building, consisting of:
 - three (3) carbon filter vessels, two (2) duty and one (1) standby, with each carbon filter vessel equipped with approximately 11,208 kilograms of filter media consisting of approximately 3,875 kilograms of catalytic activated carbon media and approximately 7,333 kilograms of potassium permanganate impregnated aluminum oxide media; and
 - a continuous emission monitoring system for hydrogen sulphide emissions from each carbon filter vessel discharge point;

discharging to the air at a maximum volumetric flow rate of 3.8 cubic metres per second through a common stack (ID: P1) having an exit diameter of 0.71 metre, extending 0.5 metre above the

roof and 12.7 metres above grade;

- one (1) hybrid anaerobic digester tank, having a total volume of 7,875 cubic metres consisting of a 1,430 cubic metres hydrolyzer component, a 6,050 cubic metres anaerobic digestion component, and a 390 cubic metres pasteurizer component, served by:
 - two (2) natural gas-fired boilers, each boiler having a maximum heat input of 2,110,000 kilojoules per hour, discharging to the air at a maximum volumetric flow rate of 0.42 cubic metre per second through a common stack (ID: P4A) having an exit diameter of 0.29 metre, extending 0.5 metre above the roof and 12.7 metres above grade;
 - one (1) emergency flare, to combust excess biogas at a maximum rate of 1,829 cubic metres per hour, discharging to the air through a stack (ID: P6A); and
 - one (1) emergency pressure relief valve (ID: P7A);
- one (1) hybrid anaerobic digester tank, each tank having a total volume of 7,875 cubic metres consisting of a 1,430 cubic metres hydrolyzer component, a 6,050 cubic metres anaerobic digestion component, and a 390 cubic metres pasteurizer component, served by:
 - two (2) natural gas-fired boilers, each boiler having a maximum heat input of 2,110,000 kilojoules per hour, discharging to the air at a maximum volumetric flow rate of 0.42 cubic metre per second through a common stack (ID: P4B) having an exit diameter of 0.29 metre, extending 0.5 metre above the roof and 12.7 metres above grade;
 - one (1) emergency flare, to combust excess biogas at a maximum rate of 1,829 cubic metres per hour, discharging to the air through a stack (ID: P6B); and
 - one (1) emergency pressure relief valve (ID: P7B);
- two (2) liquid surge tanks, to provide storage for liquid feedstock, having storage capacities of 1,000 and 4,000 cubic metres with each liquid surge tank served by the following:
 - two (2) activated carbon adsorption units, one (1) duty and one (1) standby, to control odorous emissions from each liquid surge tank, with each unit equipped with 276 kilograms of catalytic activated carbon media, and discharging to the air at a maximum volumetric flow rate of 0.01 cubic metre per second, through separate stacks (ID: P2A and P2B) having an exit diameter of 0.15 metre, extending 5.2 metres above the roof and 8.9 metres above grade;
 - one (1) continuous emissions monitoring system for hydrogen sulphide emissions from the activated carbon adsorption unit point of discharge;
- one (1) natural gas-fired boiler, serving the Receiving Building, having a maximum heat input of 1,055,000 kilojoules per hour, discharging to the air at a maximum volumetric flow rate of 0.1 cubic metre per second through a stack (ID: P3) having an exit diameter of 0.15 metre, extending 0.5

metre above the roof and 12.7 metres above grade;

- one (1) pressure swing adsorption biogas upgrading system including the following emission sources:
 - two (2) activated carbon adsorption units, one (1) duty and one (1) standby, to treat hydrogen sulphide, each unit equipped with 5,600 kilograms of activated carbon media and a dedicated continuous emission monitoring system for each carbon adsorption unit; and
 - two (2) activated carbon adsorption units, one (1) duty and one (1) standby, to treat volatile organic carbon, each unit equipped with 1,043 kilograms of activated carbon media and a dedicated continuous emission monitoring system for each carbon adsorption unit;

discharging to the air at a maximum volumetric flow rate of 0.1 cubic metre per second through a common exhaust stack (ID: PS5) having an exit diameter of 0.1 metre, extending 5.5 metres above grade;

all in accordance with the Environmental Compliance Approval Application submitted by H & D Properties Ltd., dated May 21, 2020, and signed by Don Duncan, Owner; the supporting Emission Summary and Dispersion Modelling report prepared by CH Four Biogas, Inc., dated September 2022, and signed by Claire Allen P.Eng.; the additional information submitted by Claire Allen, P.Eng. via emails dated April 14, 2022, June 6, 2022, July 22, 2022, September 14, 2022, October 31, 2022, November 8, 2022, January 24, 2023, and March 30, 2023; and the supporting Acoustic Assessment Report, prepared by Freefield Ltd., dated October 24, 2022 and signed by Hugh Williamson, Ph.D., P.Eng.

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 Freefield Ltd., dated October 24, 2022 and signed by Hugh Williamson, Ph.D., P.Eng.;
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 hybrid anaerobic digesters 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 Flare" means the biogas flare system, serving each Anaerobic Digester, 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. "Biogas Upgrading System" means the biogas upgrading system described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
11. "Company" means H & D Properties 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;
12. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
13. "Digestate" has the same meaning as defined in the Waste Approval;
14. "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 Claire Allen, P.Eng./CH Four Biogas, Inc. and dated September 2022 submitted in support of the application including any addendum submissions made during the Ministry's review of the Company's application;
15. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
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 Receiving 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 including, but not limited to silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers. It also means the noise control measures outlined in the Acoustic Assessment Report;
25. "O. Reg. 419/05" means Ontario REGulation 419/05, Air Pollution - Local Air Quality, as amended;
26. "Odour Control Units" means the activated carbon adsorption units 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. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
30. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5

of the Source Testing Code;

31. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report", dated March 2018, as amended;
32. "Professional Engineer" means a Professional Engineer as defined within the Professional Engineers Act, R.S.O., c. P.28, as amended;
33. "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;
34. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995 as amended;
35. "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;
36. "Receiving Building" means the fully enclosed building located at the Site where the Organic Waste is received, temporarily stored and pre-processed, prior to transfer to the Anaerobic Digester;
37. "Rejected Waste" has the same meaning as defined in the Waste Approval;
38. "Residual Waste" has the same meaning as defined in the Waste Approval;
39. "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.);
40. "Site" has the same meaning as defined in the Waste Approval;
41. "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;

42. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
43. "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;
44. "Truck(s)" means trucks delivering feedstock, shipping liquid digestate or shipping inorganic waste; and
45. "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.

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 Organics Reception Building as required in this Approval;
 - vi. procedures for monitoring the performance of the Odour Control Units; and

- vii. the frequency of the inspection and replacement of the media(s) in the Odour Control Units;
- b. implement the recommendations of the Manual.

2. ODOUR PERFORMANCE REQUIREMENTS

1. The Company shall operate and maintain the Facility so that the maximum 10-minute average concentration of odour at the most impacted Sensitive Receptor, computed in accordance with Schedule "A", resulting from the operation of the Facility, shall not be greater than 1.0 odour unit under all atmospheric conditions.

3. 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 Receiving Building is designed and constructed such that the potential for air leakages from the Receiving Building is minimized;
 - b. the fully enclosed Receiving 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 processing are undertaken in the fully enclosed Receiving Building, except for the solid odourless feedstock - e.g. starch which will directly delivered to the 200 cubic metre storage silo;
 - 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 equipped with a carbon filter on the tank vent to treat any odorous air displaced from the loading of Digestate into the tank of the truck;
 - f. the Organic Waste is processed in the approximate order of receipt;
 - g. all doors in the fully enclosed Receiving Building are kept closed at all times, except during shipping and/or receiving, and for operational/maintenance purposes;
 - h. all bay doors in the fully enclosed Receiving Building are fast acting doors design;
 - i. all bay doors in the fully enclosed Receiving Building are fitted with air curtains to minimize

- the escape of odorous emissions when the bay door(s) is/are opened;
- j. the bay doors in the fully enclosed Receiving Building are not opened at the same time;
 - k. the fully enclosed Receiving Building is equipped with negative pressure differential sensor(s) at locations appropriate to avoid atmospheric interference;
 - l. 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 Receiving Building;
 - m. the fan blower associated with the ventilation system in the fully enclosed 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 the closed position;
 - n. the fully enclosed 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;
 - o. the negative pressure and negative air balance for the fully enclosed Receiving 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 Receiving 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 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
 - 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.

4. ODOUR CONTROL UNITS

1. The Company shall ensure that the media(s) in each of the Odour Control Units is replaced before it is Exhausted.
2. The Company shall monitor the operational parameters of the Odour Control Units, either as specified in the manual of the Odour Control Units 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 Units, such as hydrogen sulphide concentration measured by the continuous emission monitor at the outlet of each activated carbon filter unit 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 Units after its successful commissioning including an analysis of parameter trends and their comparison to the design levels.

5. BIOGAS FLARE

1. The Company shall ensure that the Biogas Flare system is designed and operated to comply, at all times, with a destruction efficiency of at least 98%.
2. The Company shall maintain the Biogas Flare system, so that in the instance of a process upset and/or when the Biogas Upgrading system is inoperable, that the flare may be utilized to burn off-spec gases and as a fully functioning stand-by system.

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 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 implementation of any proposed modifications that may impact odour emissions;
 - b. review and evaluate 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, the Odour Management Plan for the control of odour emissions;
 - 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 the 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. 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 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 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 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 Receiving Building, including the need to install any additional fans required to maintain the target negative pressure and negative air balance within the fully enclosed 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 fully enclosed 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 alarm is triggered;
- j. an evaluation of the negative pressure and air balance inside the fully enclosed Receiving Building;
- k. the monitoring period duration for the negative pressure assessment for the fully enclosed 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 Receiving 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 Receiving 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 Receiving Building;
 - ii. whether the negative pressure monitoring system follows ideal methodology for data collection, monitoring and reporting of the negative pressure within the Receiving Building;
 - iii. whether any part of the negative pressure ventilation and monitoring system is inadequate for the purposes of odour containment within the Receiving 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 Receiving 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 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.

8. SOURCE TESTING

1. The Company shall perform Source Testing in accordance with Schedule "B" to determine the rate of emission of odour and hydrogen sulphide from the Odour Control Units, six months after the receipt of any waste at the Site and repeated annually thereafter, or at a date and frequency as directed or agreed to in writing by the District Manager.

9. 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.

10. NOTIFICATION OF COMPLAINTS

1. The Company shall notify the District Manager, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
 - a. a description of the nature of the complaint; and
 - b. the time and date of the incident to which the complaint relates.

11. NOISE

1. The Company shall:
 - a. implement, prior to the commencement of operation of the Equipment, the Noise Control

Measures as outlined in the Acoustic Assessment Report;

- b. limit Trucks arrivals and departures during the day-time hours of 7 a.m. to 7 p.m. to a maximum of six (6) Trucks per sixty (60) minute period;
- c. limit Trucks arrivals and departures during the evening and night-time hours of 7 p.m. to 7 a.m. to a maximum of one (1) Truck per sixty (60) minute period;
- d. at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300; and
- e. properly maintain the Noise Control Measures ensuring that they continue to meet the acoustical performance outlined in the Acoustic Assessment Report.

12. 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 three (3) months after the commencement of operation of the Equipment.
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.

SCHEDULE "A"

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:

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

where, $X_{10\text{min}}$ is the 10-minute average concentration, and $X_{60\text{min}}$ 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 "B"

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 Receiving 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 "A". The updated Emission Summary Table from the updated ESDM Report shall be submitted with the Source Testing report.

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

1. Condition No. 1 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 is included (check with Steve M.)
3. Condition No. 3 is included to require the Company to properly operate and maintain the Facility/Equipment to minimize the impact on the environment.
4. Condition Nos. 4, 5, and 6 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.
5. Condition Nos. 7 and 8 are included to require the Company to gather accurate information so that compliance with the EPA, the regulations, and this Approval can be verified.
6. Condition No. 9 is 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.
7. Condition No. 10 is included to require the Company to notify staff of the Ministry so as to assist the Ministry with the review of the site's compliance.
8. Condition No. 11 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. 12 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.

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**

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 21st day of August, 2023



Nancy E Orpana, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

ES/

c: District Manager, MECP Kingston - District
Claire Allen, CH Four Biogas Inc.