

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0462-BVALHQ
Issue Date: April 6, 2021

Generate Capital Canada STF GP Ltd. as general partner for and on behalf of Generate Resource Recovery LP
1087 Green Valley Road
London, Ontario
N6N 1E4

Site Location: Organic Waste Processing Facility
806548 Oxford Road 29, Lot 21, Concession 6
Blandford-Blenheim Township, County of Oxford
N0J 1G0

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

Description Section

An *Organic Waste* receiving and processing *Facility* that produces energy materials (in various forms) to be used as a fuel source and agricultural products and that receives, processes, stores, and ships organic waste, coffee residue and pet food waste, consisting of the following processes and support units:

- receiving,
- inspection/sorting,
- shredding,
- extracting,
- blending/mixing,
- screening,
- milling,
- metering,

- storage,
- shipping, and
- one (1) regenerative thermal oxidizer, with a maximum thermal heat input rating of 8,440,480 kilojoules per hour.

including the *Equipment* and any other ancillary and support processes and activities, operating at a *Facility Production Limit* of up to 816 tonnes per day of waste receiving and up to 1,020 tonnes per day of waste processing; exhausting to the atmosphere as described in the *ESDM Report*.

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

1. "*ACB list*" means the document entitled "Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", as amended from time to time and published by the *Ministry* and available on a Government website;
2. "*Acceptable Point of Impingement Concentration*" means a concentration accepted by the *Ministry* as not likely to cause an adverse effect for a *Compound of Concern* that,
 - a. is not identified in the *ACB list*, or
 - b. is identified in the *ACB list* as belonging to the category "Benchmark 2" and has a concentration at a *Point of Impingement* that exceeds the concentration set out for the contaminant in that document.

With respect to the *Original ESDM Report*, the *Acceptable Point of Impingement Concentration* for a *Compound of Concern* mentioned above is the concentration set out in the *Original ESDM Report*;

3. "*Acoustic Assessment Report*" means the report, prepared in accordance with *Publication NPC-233* and Appendix A of the *Basic Comprehensive User Guide*, by Brad Bergeron / RWDI AIR Inc. and dated November 13, 2019, submitted in support of the application, that documents all sources of noise emissions and *Noise Control Measures* present at the *Facility*, as updated in accordance with Condition 5 of this *Approval*;
4. "*Acoustic Assessment Summary Table*" means a table prepared in accordance with the *Basic Comprehensive User Guide* summarising the results of the *Acoustic Assessment Report*, as updated in accordance with Condition 5 of this *Approval*;
5. "*Acoustic Audit* " means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the *Facility* , assessed to determine compliance with the Performance Limits for the *Facility* regarding noise emissions, completed in accordance with the procedures set in *Publication NPC-103* and reported in accordance with *Publication NPC-233*;

6. "*Acoustic Audit Report* " means a report presenting the results of an *Acoustic Audit*, prepared in accordance with *Publication NPC-233*;
7. "*Acoustical Consultant* " means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with *Ministry* noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a *Facility*;
8. "*AERMOD*" means the dispersion model developed by the American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) including the PRIME (Plume Rise Model Enhancement) algorithm, used to calculate one-hour average concentrations of a contaminant at the *Point of Impingement* and at the most impacted *Sensitive Receptor*;
9. "*Approval*" means this entire Environmental Compliance Approval and any *Schedules* to it;
10. "*Basic Comprehensive User Guide*" means the *Ministry* document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
11. "*Company*" means Generate Capital Canada STF GP Ltd. as general partner for and on behalf of Generate Resource Recovery LP operating as Generate Resource Recovery LP 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. "*Compound of Concern*" means a contaminant described in paragraph 4 subsection 26 (1) of *O. Reg. 419/05*, namely, a contaminant that is discharged from the *Facility* in an amount that is not negligible;
13. "*Description Section*" means the section on page one of this *Approval* describing the *Company's* operations and the *Equipment* located at the *Facility* and specifying the *Facility Production Limit* for the *Facility*;
14. "*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*;
15. "*District Manager*" means the District Manager of the appropriate local district office of the *Ministry*, where the *Facility* is geographically located;
16. "*Dust Management Plan*" means a document or a set of documents, as accepted by the *District Manager*, that provide written instructions to staff of the *Company*, for the purpose of meeting the requirements of Condition 11.1 of this *Approval*;
17. "*Emission Event*" means an event when the *Company* or the *Ministry* detects an emission of odour or any contaminant off-site at any *Sensitive Receptor* due to operation of the *Facility*;

18. "*Emission Summary Table*" means a table described in paragraph 14 of subsection 26 (1) of *O. Reg. 419/05*;
19. "*Environmental Assessment Act*" means the Environmental Assessment Act, R.S.O. 1990, c.E.18, as amended;
20. "*EPA*" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
21. "*Equipment*" means equipment or processes described in the *ESDM Report*, this *Approval* and in the *Schedules* referred to herein and any other equipment or processes;
22. "*Equipment with Specific Operational Limits*" means the regenerative thermal oxidizer, any *Equipment* related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other *Equipment* that is specifically referenced in any published *Ministry* document that outlines specific operational guidance that must be considered by the *Director* in issuing an *Approval*;
23. "*ESDM Report*" means the most current Emission Summary and Dispersion Modelling Report that describes the *Facility*. The *ESDM Report* is based on the *Original ESDM Report* and is updated after the issuance of this *Approval* in accordance with section 26 of *O. Reg. 419/05* and the *Procedure Document*;
24. "*Facility*" means the entire operation located on the property where the *Equipment* is located;
25. "*Facility Production Limit*" means the production limit placed by the *Director* on the main product(s) or raw materials used by the *Facility*;
26. "*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*;
27. "*Log*" means a document that contains a record of each change that is required to be made to the *ESDM Report* and *Acoustic Assessment Report*, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a *Point of Impingement* and all changes to information associated with a *Modification* to the *Facility* that satisfies Condition 2;
28. "*Loss of Negative Pressure*" means a continuous five-minute period in which the *Resource Recovery Building* is not in a state of negative pressure, as determined by the methods permitted in this *Approval* ;

29. "*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*;
30. "*Minister*" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the *EPA* under the Executive Council Act;
31. "*Ministry*" means the ministry of the *Minister*;
32. "*Modification*" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the *Facility* that may discharge or alter the rate or manner of discharge of a *Compound of Concern* to the air or discharge or alter noise or vibration emissions from the *Facility*;
33. "*Noise Control Measures*" means measures to reduce the noise emissions from the *Facility* and/or *Equipment* including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers;
34. "*Odour Management Plan*" means a document or a set of documents, as accepted by the *District Manager*, that provide written instructions to staff of the *Company*, for the purpose of meeting the requirements of Condition 10.1 of this *Approval*;
35. "*O. Reg. 419/05*" means Ontario Regulation 419/05, Air Pollution – Local Air Quality, as amended;
36. "*Organic Waste*" means green bin organic materials, organic waste from human and animal food industries and institutions, woodwaste and soiled animal bedding.
37. "*Original ESDM Report*" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of *O. Reg. 419/05* and the *Procedure Document* by RWDI AIR Inc. and dated November 13, 2019 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this *Approval*;
38. "*Point of Impingement*" has the same meaning as in section 2 of *O. Reg. 419/05*;
39. "*Point of Reception*" means Point of Reception as defined by *Publication NPC-300*;
40. "*Pre-Test Plan*" means a plan for the *Source Testing* including the information required in Section 5 of the *Source Testing Code*;
41. "*Procedure Document*" means *Ministry* guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;

42. "*Processes with Significant Environmental Aspects*" means the *Equipment* which, during regular operation, would discharge one or more contaminants into the air in an amount which is not considered as negligible in accordance with section 26 (1) 4 of *O. Reg. 419/05* and the *Procedure Document*;
43. "*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;
44. "*Publication NPC-207*" means the *Ministry* draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the *Ministry*, August 1978, as amended;
45. "*Publication NPC-233*" means the *Ministry* Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
46. "*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;
47. "*Resource Recovery Building*" means the building, equipped with a regenerative thermal oxidizer, that receives and processes source separated organics;
48. "*Schedules*" means the following schedules attached to this *Approval* and forming part of this *Approval* namely:
- Schedule A - Supporting Documentation
 - Schedule B - Procedure to calculate and record the 10-minute average concentration of odour;
 - Schedule C - Continuous Temperature Monitoring and Recording System Requirements;
 - Schedule D - Targeted Sources and Test Contaminants for Source Testing; and
 - Schedule E - Source Testing Procedures.
49. "*Sensitive Receptor*" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from odour discharges from the *Facility*, including one or a combination of:
- a. private residences or public facilities where people sleep (e.g.: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.),
 - b. institutional facilities (e.g.: schools, churches, community centres, day care centres, recreational centres, etc.),
 - c. outdoor public recreational areas (e.g.: trailer parks, play grounds, picnic areas, etc.), and
 - d. other outdoor public areas where there are continuous human activities (e.g.: commercial plazas and office buildings).

50. "*Shut-down*" means an operating condition during which the operation of a source of contaminant is decreased from a normal operating condition to an inoperative state;
51. "*Source Testing*" means site-specific sampling and testing to measure emissions resulting from operating the *Targeted Sources* under operating conditions that will derive an emission rate that, for the relevant averaging period of the contaminant, is at least as high as the maximum emission rate that the source of contaminant is reasonably capable of, within the approved operating range of the *Targeted Sources* which satisfies paragraph 1 of subsection 11(1) of *O. Reg. 419/05* ;
52. "*Source Testing Code*" means the Ontario Source Testing Code, dated June 2010, prepared by the *Ministry*, as amended;
53. "*Start-up*" means an operating condition during which the operation of a source of contaminant is increased from an inoperative state to normal operating conditions;
54. "*Targeted Sources*" means the sources listed in Schedule D;
55. "*Test Contaminants*" means the contaminants listed in Schedule D;
56. "*Substantiated Complaint* " means a complaint for an emission of odour or any contaminant at any *Sensitive Receptor* location, received either by the *Company* or the *District Manager* , which is attributed to the *Company* 's activities at the *Facility* ;
57. "*Toxicologist*" means a qualified professional currently active in the field of risk assessment and toxicology that has a combination of formal university education, training and experience necessary to assess contaminants; and
58. "*Written Summary Form*" means the electronic questionnaire form, available on the *Ministry* website, and supporting documentation, that documents the activities undertaken at the *Facility* in the previous calendar year.

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

TERMS AND CONDITIONS

1. GENERAL

1. Except as otherwise provided by this *Approval*, the *Facility* shall be designed, developed, built, operated and maintained in accordance with the terms and conditions of this *Approval* and in accordance with the following *Schedules* attached hereto:
 - Schedule A - Supporting Documentation

- Schedule B - Procedure to calculate and record the 10-minute average concentration of odour;
- Schedule C - Continuous Temperature Monitoring and Recording System Requirements;
- Schedule D - Targeted Sources and Test Contaminants for Source Testing; and
- Schedule E - Source Testing Procedures.

2. LIMITED OPERATIONAL FLEXIBILITY

1. Pursuant to section 20.6 (1) of the *EPA* and subject to Conditions 2.2 and 2.3 of this *Approval*, future construction, alterations, extensions or replacements are approved in this *Approval* if the future construction, alterations, extensions or replacements are *Modifications* to the *Facility* that:
 - a. are within the scope of the operations of the *Facility* as described in the *Description Section* of this *Approval*;
 - b. do not result in an increase of the *Facility Production Limit* above the level specified in the *Description Section* of this *Approval*; and
 - c. result in compliance with the performance limits as specified in Condition 4.
2. Condition 2.1 does not apply to,
 - a. the addition of any new *Equipment with Specific Operational Limits* or to the *Modification* of any existing *Equipment with Specific Operational Limits* at the *Facility*; and
 - b. *Modifications* to the *Facility* that would be subject to the *Environmental Assessment Act*.
3. Condition 2.1 of this *Approval* shall expire ten (10) years from the date of this *Approval*, unless this *Approval* is revoked prior to the expiry date. The *Company* may apply for renewal of Condition 2.1 of this *Approval* by including an *ESDM Report* and an *Acoustic Assessment Report* that describes the *Facility* as of the date of the renewal application.

3. REQUIREMENT TO REQUEST AN *ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION*

1. Prior to making a *Modification* to the *Facility* that satisfies Condition 2.1.a. and 2.1.b., the *Company* shall prepare a proposed update to the *ESDM Report* to reflect the proposed *Modification*.
2. The *Company* shall request approval of an *Acceptable Point of Impingement Concentration* for a *Compound of Concern* if the *Compound of Concern* is not identified in the *ACB list* as belonging to the category "Benchmark 1" and a proposed update to an *ESDM Report* indicates that one of the following changes with respect to the concentration of the *Compound of Concern* may occur:

- a. The *Compound of Concern* was not a *Compound of Concern* in the previous version of the *ESDM Report* and
 - i. the concentration of the *Compound of Concern* exceeds the concentration set out for the contaminant in the *ACB list*; or
 - ii. the *Compound of Concern* is not identified in the *ACB list*; or
- b. The concentration of the *Compound of Concern* in the updated *ESDM Report* exceeds the higher of,
 - i. the most recent *Acceptable Point of Impingement Concentration*, and
 - ii. the concentration set out for the contaminant in the *ACB list*, if the contaminant is identified in that document.
3. The request required by Condition 3.2 shall propose a concentration for the *Compound of Concern* and shall contain an assessment, performed by a *Toxicologist*, of the likelihood of the proposed concentration causing an adverse effect at *Points of Impingement*.
4. If the request required by Condition 3.2 is a result of a proposed *Modification* described in Condition 3.1, the *Company* shall submit the request, in writing, to the *Director* at least 30 days prior to commencing to make the *Modification*. The *Director* shall provide written confirmation of receipt of this request to the *Company*.
5. If a request is required to be made under Condition 3.2 in respect of a proposed *Modification* described in Condition 3.1, the *Company* shall not make the *Modification* mentioned in Condition 3.1 unless the request is approved in writing by the *Director*.
6. If the *Director* notifies the *Company* in writing that the *Director* does not approve the request, the *Company* shall,
 - a. revise and resubmit the request; or
 - b. notify the *Director* that it will not be making the *Modification*.
7. The re-submission mentioned in Condition 3.6 shall be deemed a new submission under Condition 3.2.
8. If the *Director* approves the request, the *Company* shall update the *ESDM Report* to reflect the *Modification*.
9. Condition 3 does not apply if Condition 2.1 has expired.

4. PERFORMANCE LIMITS

1. Subject to Condition 4.2, the *Company* shall not discharge or cause or permit the discharge of a *Compound of Concern* into the air if,
 - a. the *Compound of Concern* is identified in the *ACB list* as belonging to the category "Benchmark 1" and the discharge results in the concentration at a *Point of Impingement* exceeding the Benchmark 1 concentration; or
 - b. the *Compound of Concern* is not identified in the *ACB list* as belonging to the category "Benchmark 1" and the discharge results in the concentration at a *Point of Impingement* exceeding the higher of,
 - i. if an *Acceptable Point of Impingement Concentration* exists, the most recent *Acceptable Point of Impingement Concentration*, and
 - ii. the concentration set out for the contaminant in the *ACB list*, if the contaminant is identified in that document.
2. Condition 4.1 does not apply if the benchmark set out in the *ACB list* has a 10-minute averaging period and no ambient monitor indicates an exceedance at a *Point of Impingement* where human activities regularly occur at a time when those activities regularly occur.
3. The *Company* shall, at all times, ensure that the noise emissions from the *Facility* comply with the limits set out in *Ministry Publication NPC-300*.
4. The *Company* shall, at all times, ensure that the vibration emissions from the *Facility* comply with the limits set out in *Ministry Publication NPC-207*.
5. The *Company* shall take all reasonable steps to operate and maintain the *Facility* so that the maximum modelled 10-minute average concentration of odour at the most impacted *Sensitive Receptor*, computed in accordance with Schedule B, resulting from the operation of the *Facility*, including fugitive emissions, shall not be greater than 1.0 odour unit under all atmospheric conditions.
6. The *Company* shall ensure that the concentration in the combustion gases leaving the regenerative thermal oxidizer stack, of organic matter, expressed as equivalent methane, being an average of ten measurements taken at approximately one minute intervals, shall not exceed 100 parts per million by volume, measured on an undiluted basis.
7. The *Company* shall operate any *Equipment with Specific Operational Limits* approved by this *Approval* in accordance with the *Original ESDM Report* and Conditions 10 and 11 in this *Approval*.

5. DOCUMENTATION REQUIREMENTS

1. The *Company* shall maintain an up-to-date *Log*.
2. No later than March 31 in each year, the *Company* shall update the *Acoustic Assessment Report* and shall update the *ESDM Report* in accordance with section 26 of *O. Reg. 419/05* so that the information in the reports is accurate as of December 31 in the previous year.
3. The *Company* shall make the *Emission Summary Table* (see section 27 of *O. Reg. 419/05*) and *Acoustic Assessment Summary Table* available for examination by any person, without charge, by posting it on the Internet or by making it available during regular business hours at the *Facility*.
4. The *Company* shall, within three (3) months after the expiry of Condition 2.1 of this *Approval*, update the *ESDM Report* and the *Acoustic Assessment Report* such that the information in the reports is accurate as of the date that Condition 2.1 of this *Approval* expired.
5. Conditions 5.1 and 5.2 do not apply if Condition 2.1 has expired.

6. REPORTING REQUIREMENTS

1. Subject to Condition 6.2, the *Company* shall provide the *Director* no later than June 30 of each year, a *Written Summary Form* to be submitted through the *Ministry's* website that shall include the following:
 - a. a declaration of whether the *Facility* was in compliance with section 9 of the *EPA, O. Reg. 419/05* and the conditions of this *Approval*;
 - b. a summary of each *Modification* satisfying Condition 2.1.a. and 2.1.b. that took place in the previous calendar year that resulted in a change in the previously calculated concentration at a *Point of Impingement* for any *Compound of Concern* or resulted in a change in the sound levels reported in the *Acoustic Assessment Summary Table* at any *Point of Reception*.
2. Condition 6.1 does not apply if Condition 2.1 has expired.

7. OPERATION AND MAINTENANCE

1. The *Company* shall prepare and implement, not later than three (3) months from the date of this *Approval*, operating procedures and maintenance programs for all *Processes with Significant Environmental Aspects*, which shall specify as a minimum:
 - a. frequency of inspections and scheduled preventative maintenance;
 - b. procedures to prevent upset conditions;

- c. procedures to minimize all fugitive emissions;
 - d. procedures to prevent and/or minimize odorous emissions;
 - e. procedures to prevent and/or minimize noise emissions; and
 - f. procedures for record keeping activities relating to the operation and maintenance programs.
2. The *Company* shall ensure that all *Processes with Significant Environmental Aspects* are operated and maintained in accordance with this *Approval*, the operating procedures and maintenance programs.

8. COMPLAINTS RECORDING AND REPORTING

1. If at any time, the *Company* or the *Ministry* receives a complaint, or during an occurrence of an *Emission Event*, the *Company* shall respond to the complaint/*Emission Event* according to the following procedure:
- a. The *Company* shall record and number each complaint/*Emission Event* and each record shall include the following:
 - i. the nature of the complaint;
 - ii. name, address and the telephone number of the complainant, if known;
 - iii. time and date of the complaint/*Emission Event*;
 - iv. details of the complaint/*Emission Event*;
 - v. meteorological conditions at the time of the complaint/*Emission Event* including, but not limited to the ambient temperature, approximate wind speed and its direction; and
 - vi. activities being undertaken at the *Facility* at the time of the complaint/*Emission Event*.
 - b. The *Company* shall inform the *District Manager* of the complaint/*Emission Event* within two (2) business days of receipt of the complaint/*Emission Event* .
 - c. The *Company* shall initiate appropriate steps to determine all possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complaint/*Emission Event*.

2. The *Company* shall provide the *District Manager* with a written report within one (1) week of the complaint/*Emission Event* date, listing the actions taken to resolve the complaint and any recommendations for remedial measures, and managerial or operational changes to avoid the recurrence of similar incidents.
3. If the *District Manager* deems the actions taken as per Condition 8.2 to be unsuitable, insufficient or ineffective, the *District Manager* may direct the *Company*, in writing, to take further measures to address the noted failure, upset or malfunction including pursuant to section 39 of the *EPA* requiring a reduction in the receipt of *Organic Waste*, cessation of the receipt of *Organic Waste*, removal and off-*Facility* disposal of *Organic Waste* from the *Facility* as well as making repairs or *Modifications* to *Equipment* or processes.

9. RECORD KEEPING REQUIREMENTS

1. Any information requested by any employee in or agent of the *Ministry* concerning the *Facility* and its operation under this *Approval*, including, but not limited to, any records required to be kept by this *Approval*, shall be provided to the employee in or agent of the *Ministry*, upon request, in a timely manner.
2. Unless otherwise specified in this *Approval*, the *Company* shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this *Approval*, including,
 - a. a copy of the *Original ESDM Report* and each updated version;
 - b. a copy of each version of the *Acoustic Assessment Report*;
 - c. supporting information used in the emission rate calculations performed in the *ESDM Reports* and *Acoustic Assessment Reports*;
 - d. the records in the *Log*;
 - e. copies of each *Written Summary Form* provided to the *Ministry* under Condition 6.1 of this *Approval*;
 - f. records of maintenance, repair and inspection of *Equipment* related to all *Processes with Significant Environmental Aspects*; and
 - g. all records related to environmental complaints made by the public as required by Condition 8 of this *Approval*.

10. ODOUR

1. The *Company* shall immediately implement the *Odour Management Plan* to prevent or mitigate odour emissions from the operation of the *Facility*. The *Odour Management Plan* shall be updated as necessary or at the direction of the *District Manager*.
2. The *Company* shall:
 - a. with the exception of sealed waste that may be stored outdoors in accordance with this *Approval*, the *Company* shall ensure that all unloading and pre-processing of the *Organic Waste* is undertaken entirely within the confines of the processing buildings;
 - i. Condition 10.2.a does not apply to the following self-contained pieces of waste management equipment/infrastructure:
 - A. waste compactors with the associated transfer trailer;
 - B. regenerative thermal oxidizers;
 - C. trucks that are backed up to, and sealed tightly with, the unloading doors;
 - D. trucks that are covered and do not contain odorous materials;
 - E. liquid tanker filling on spill containment via camlock or top fill which can occur outside; and
 - F. loading of dry bulk non-odorous materials such as dog food and coffee grinds outside into trailers on an impermeable surface by front end loader or auger;
 - b. ensure that no trucks containing putrescible waste remain parked outdoors at the *Facility* overnight;
 - c. install a continuous negative air pressure control and monitoring system in the *Resource Recovery Building* ;
 - d. ensure the negative air pressure control and monitoring system is able to continuously monitor and record the negative air pressure atmosphere within the *Resource Recovery Building* ;
 - e. implement the Contingency Plans detailed in the *Odour Management Plan* and the *Dust Management Plan* as they pertain to the action(s) the *Company* shall take should a *Loss of Negative Pressure* occur within the *Resource Recovery Building* ;

- f. record and keep a log of each instance of a *Loss of Negative Pressure* , including date, time, building, duration of pressure loss, reason for pressure loss and the reactive measure taken, if any, and maintain these records such that they can be made available to a Provincial Officer at any time;
 - g. in the event that there is a *Loss of Negative Pressure* and negative pressure cannot be regained and maintained, the *Company* shall notify the *District Manager* and immediately cease accepting additional *Organic Waste* in the *Resource Recovery Building* ;
 - h. ensure that the exterior loading bay doors into buildings are kept closed at all times except to permit the entry or exit of *Organic Waste* transportation vehicles or receiving of *Organic Waste* in totes or similar containers or as required for maintenance activities;
 - i. ensure that the air from the *Resource Recovery Building* is exhausted through the regenerative thermal oxidizer when waste is being processed;
 - j. operate the regenerative thermal oxidizer at all times when processes associated with the regenerative thermal oxidizer are operating to control odour emissions from the *Facility*;
 - k. continuously monitor and record the operating temperature of the regenerative thermal oxidizer, when they are in operation. The temperature monitor and recorder shall comply with the requirements outlined in Schedule C of this *Approval*;
 - l. not introduce exhausts stream from any of the *Facility* 's operations into the regenerative thermal oxidizer until a minimum operating temperature of 800 degree Celsius is reached in the combustion chamber, as measured by the monitoring and recording system;
 - m. maintain a minimum operating temperature of 800 degree Celsius for a minimum gas residence time of 0.75 second in the combustion chamber of the regenerative thermal oxidizer, as measured by the continuous temperature monitor, at all times while exhaust stream from any of the *Facility's* operations are being fed into the regenerative thermal oxidizer;
 - n. prepare, not later than thirty (30) days prior to the receiving *Organic Waste* and update, as necessary, a manual outlining the operating procedures and a maintenance program for the regenerative thermal oxidizer, including the operating and maintenance procedures recommended by the equipment suppliers, the calibration procedures of the continuous monitor and data recorder.
3. Requirement in Condition 10.1.1.m does not apply during the following periods:
- a. The *Start-up* and *Shut-down* periods of the regenerative thermal oxidizer if,
 - i. the *Shut-down* does not last for more than three (3) hours,

- ii. the *Start-up* does not last for more than three (3) hours,
 - iii. the Start-up or Shut-down is conducted according to a written plan that minimizes discharges into the air during the period of start-up or shut-down.
- 4. The *Company* shall monitor and record the following physical parameter for the sealed processing building, through a combination of sensors, meters and physical probes, at frequencies either as recommended by the *Equipment* suppliers or as determined by operational needs:
 - a. negative pressure
- 5. In the event of regenerative thermal oxidizer failure or shutdown and/or if a *Loss of Negative Pressure* in the *Resource Recovery Building* occurs, the *Company* shall immediately cease receiving the *Organic Waste* and implement any necessary additional odour containment and control measures, to prevent an adverse effect resulting from the operation of the *Facility*.
- 6. In the event that the regenerative thermal oxidizer is not brought back on-line within forty eight (48) hours or that the negative pressure can not be re-established in the enclosed building within forty eight (48) hours or as acceptable to the *District Manager*, all *Organic Waste* temporarily stored on the tipping floor shall be removed from the *Facility* and no additional *Organic Waste* shall be accepted at the *Facility* until such time as the regenerative thermal oxidizer is fully functioning as designed and the negative pressure in the *Resource Recovery Building* is re-established.

11. FUGITIVE DUST CONTROL

- 1. The *Company* shall immediately implement the *Dust Management Plan* to prevent or mitigate dust emissions from the operation of the *Facility*. The *Dust Management Plan* shall be updated as necessary or at the direction of the *District Manager*.

12. SOURCE TESTING

- 1. The *Company* shall perform *Source Testing* in accordance with the procedures in Schedule E to determine the rates of emissions of the *Test Contaminants* from the *Targeted Sources* listed in Schedule D, within three (3) months from date the *Facility* first begins operating at a minimum 50% waste throughput capacity.
- 2. The *Company* shall repeat the *Source Testing* once every two (2) years after the first *Source Testing* or as directed or agreed by the *District Manager*.

13. 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 twenty-four (24) 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*.

14. REVOCATION OF PREVIOUS APPROVALS

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

SCHEDULE A

Supporting Documentation

1. Environmental Compliance Approval Application, dated November 13, 2019, signed by Brandon Moffatt and submitted by the *Company*;
2. Emission Summary and Dispersion Modelling Report, prepared by RWDI AIR Inc. and dated November 13, 2019; and signed by Brad Bergeron and
3. Acoustic Assessment Report, prepared by RWDI AIR Inc., dated November 13, 2019 and signed by Brad Bergeron.

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 at the most impacted *Sensitive Receptor* that occurs and is represented in the histogram, disregarding outlying data points on the histogram as agreed to by the *Director*.
 - a. 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:

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

where X_{10min} = 10-minute average concentration

X_{60min} = one-hour average concentration

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

SCHEDULE C

Continuous Temperature Monitoring and Recording System Requirements

PARAMETER:

Temperature

LOCATION:

The sample point for the continuous temperature monitoring and recording system shall be installed at a location where the measurements are representative of the minimum temperature of the undiluted gases leaving the regenerative thermal oxidizer.

PERFORMANCE:

The Continuous Temperature Monitoring system 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
Response Time (95%)	60 sec. (max)
Operating Range (Full Scale)	1.5 times approval limit
Standard Tolerance	± 2.2 °C or ± 0.75%
Resolution	0.1 °C
Calibration	Per manufacturer's recommendations

RECORDER:

The recorder must be capable of registering continuously the measurement of the monitoring system without a significant loss of accuracy and with a time resolution of 5 minutes or better.

RELIABILITY:

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 90 percent of the time for each calendar quarter during the first full year of operation, and 95 percent, thereafter, based on the hours of operation of the regenerative thermal oxidizer.

SCHEDULE D

Targeted Sources and Test Contaminants for Source Testing:

<i>Targeted Source</i>	<i>Test Contaminants</i>	Retesting schedule
Regenerative thermal oxidizer	odour, hydrogen sulphide, total mercaptans, and organic matter	Once every two (2) calendar years

SCHEDULE E

Source Testing Procedures

1. The *Company* shall submit, not later than three (3) months prior to the *Source Testing*, to the *Manager* a *Pre-Test Plan* for the *Source Testing* required under this *Approval*. The *Company* shall finalize the *Pre-Test Plan* in consultation with the *Manager*.
2. The *Company* shall not commence the *Source Testing* required under this *Approval* until the *Manager* has approved the *Pre-Test Plan*.
3. The *Company* shall 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 (electronic format) on the *Source Testing* to the *Manager*, the *District Manager* and the *Director* not later than three (3) months after completing the *Source Testing*. The report shall be in the format described in the *Source Testing Code*, and shall also include, but not be limited to:
 1. an executive summary;
 2. an identification of the applicable North American Industry Classification System code (NAICS) for the *Facility*;
 3. records of operating conditions at the time of *Source Testing*, including but not limited to the following:
 - a. production data and equipment operating rate as a percentage of maximum capacity;
 - b. *Facility* /process information related to the operation of the *Targeted Sources*;
 - c. description of the emission sources controlled by the *Targeted Sources* at the time of testing; and
 - d. operational description of the general building ventilation at the time of testing.
 4. results of *Source Testing*, including the emission rate, emission concentration, and relevant emission factor of the *Test Contaminants* from the *Targeted Sources*;
 5. a tabular comparison of emission rates based on *Source Testing* results for the *Test Contaminants* to relevant estimates described in the *ESDM Report*.
5. The *Director* may not accept the results of the *Source Testing* if:
 1. the *Source Testing Code* or the requirement of the *Manager* were not followed;
 2. the *Company* did not notify the *Manager*, the *District Manager* and *Director* of the *Source Testing*; or

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

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

1. GENERAL

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

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

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

3. DOCUMENTATION REQUIREMENTS

Condition No. 5 is included to require the *Company* to maintain ongoing documentation that demonstrates compliance with the performance limits as specified in Condition 4 of this *Approval* and allows the *Ministry* to monitor on-going compliance with these performance limits. The *Company* is required to have an up to date *ESDM Report* and *Acoustic Assessment Report* that describe the *Facility* at all times and make the *Emission Summary Table* and *Acoustic Assessment Summary Table* from these reports available to the public on an ongoing basis in order to maintain public communication with regard to the emissions from the *Facility*.

4. REPORTING REQUIREMENTS

Condition No. 6 is included to require the *Company* to provide a yearly *Written Summary Form* to the *Ministry*, to assist the *Ministry* with the review of the site's compliance with the *EPA*, the regulations and this *Approval*.

5. OPERATION AND MAINTENANCE, ODOUR, AND FUGITIVE DUST CONTROL

Conditions No. 7, 10 and 11 are included to require the *Company* to properly operate and maintain the *Processes with Significant Environmental Aspects* to minimize the impact to the environment from these processes.

6. COMPLAINTS RECORDING AND REPORTING PROCEDURE

Condition No. 8 is included to require the *Company* to respond to any environmental complaints regarding the operation of the *Equipment*, according to a procedure that includes methods for preventing recurrence of similar incidents and a requirement to prepare and retain a written report.

7. RECORD KEEPING REQUIREMENTS

Condition No. 9 is included to require the *Company* to retain all documentation related to this *Approval* and provide access to employees in or agents of the *Ministry*, upon request, so that the *Ministry* can determine if a more detailed review of compliance with the performance limits as specified in Condition 4 of this *Approval* is necessary.

8. REVOCATION OF PREVIOUS APPROVALS

Condition No. 14 is included to identify that this *Approval* replaces all Section 9 Certificate(s) of Approval and Part II.1 Approvals in regards to the activities mentioned in subsection 9(1) of the *EPA* and dated prior to the date of this *Approval*.

9. SOURCE TESTING

Condition No. 12 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*.

10. ACOUSTIC AUDIT

Condition No. 13 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.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8069-8NDG7E issued on March 21, 2012.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

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

AND

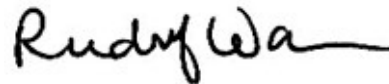
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

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

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

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

DATED AT TORONTO this 6th day of April, 2021



Rudolf Wan, P.Eng.

Director

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

SM/

c: District Manager, MECP London District Office
Brad Bergeron, RWDI Air