

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

### AMENDED RENEWABLE ENERGY APPROVAL

NUMBER 8541-9HSGG3 Issue Date: November 21, 2025

1414229 Ontario Limited operating as Escarpment Renewables

424 Sobye Rd

Beamsville, Ontario

L3M 0K8

Site Location: Grimsby Anaerobic Digestion Site

424 Sobye Rd

Grimsby Town, Regional Municipality of Niagara

L3M 0K8

You are hereby notified that, in accordance with Section 47.5 of the Environmental Protection Act, I have amended Renewable Energy Approval No. 8541-9HSGG3 issued on October 1, 2014, including all subsequent notices and amendments, for a Class 3 anaerobic digestion facility, consisting of the following:

- the construction, installation, use, operation, maintenance, and retiring of a Class 3 anaerobic digestion facility to:
  - receive, temporarily store and process and maximum of 159,000 tonnes of the Organic Waste per year;
  - generate a maximum of 1,060 kilowatts of electricity (kW<sub>2</sub>) per year;
- generate up to approximately 9,200,000 cubic metres of Renewable Natural Gas per year; and
- generate up to approximately 115,800 tonnes of the Digestate per year;

with a nameplate capacity of 1,060 kilowatts of electricity (kW<sub>e</sub>) as outlined in Schedule A.

Note: use of the site for any other type of waste is not approved under this Renewable Energy Approval, and requires obtaining a separate approval amending this Renewable Energy Approval.

For the purpose of this renewable energy approval, the following definitions apply:

- (1) "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility. "Acoustic Assessment Report" also means the Acoustic Assessment Report prepared by GHD Ltd., dated August 26, 2024 and signed by Michael Masschaele;
- (2) "Act" means the *Environmental Protection Act*, R.S.O 1990, c.E.19, as amended;
- "Activated Carbon Units" means the activated carbon adsorption units, serving the three (3) Liquid Waste Receiving Tanks and two (2) Pasteurization Systems, described in the Company's application, SCHEDULE "A" of this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- (4) "Adverse Effect" has the same meaning as in the Act;
- (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 concentrations of a contaminant at the Point of Impingement and at the most impacted Sensitive Receptor;
- (6) "Agricultural Waste" has the same meaning as in Reg. 347;
- (7) "Anaerobic Digester" means the Anaerobic Digester(s) used for anaerobic digestion of the approved Organic Waste and as defined in Reg. 347;
- (8) "Application" means the application for a Renewable Energy Approval dated February 26, 2013, signed by James Detenbeck, President, Grimsby Energy Inc., and all supporting documentation submitted with the application, including amended documentation submitted up to September 2, 2014; and as further amended by the application for an amendment to the Renewable Energy Approval dated June 26, 2017, signed by Gerhard Klammer, CEO, PurEnergy Resources Inc., and all supporting documentation submitted with the application, including amended documentation submitted up to November 17, 2017; and as further amended pro-actively by the Ministry on July 26, 2019; and as further amended by the application for an amendment to the Renewable Energy Approval dated March 25, 2022 and signed by Sam Huang, General Manager, Escarpment Renewables, and all supporting documentation submitted with the application, including amended documentation submitted up to the date this amendment is issued, and email correspondence from Mark Badali, Senior Project Evaluator, Ministry of the Environment, Conservation and Parks, to Mike Kopansky, Director of Technology Development, Miller Waste Systems, and Peter Lee, Site Engineer, Escarpment Renewables, dated August 12, 2025, with the subject line "Operational Flexibility for Escarpment Renewables AD RE: Updated draft REA amendment";

- (9) "Approval" means this Renewable Energy Approval issued in accordance with Section 47.4 of the Act, including any schedules to it;
- (10) "Biofilter" means the biofilter described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- (11) "Biogas" means the gaseous waste generated from microbial biodegradation of the approved Organic Waste conducted under anaerobic conditions and has the physical attributes and the chemical composition, in particular the methane and carbon dioxide content, of a gas considered to be a biogas by the biogas industry;
- "Biogas-CHP Treatment System" means the biogas pre-treatment and reciprocating engine generators for generating heat and electricity and any associated gas treatment equipment described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- (13) "Biogas-RNG Upgrading System" means the biogas pre-treatment and upgrading system for generating Renewable Natural Gas and any associated gas treatment equipment described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- (14) "CFIA" means the Canadian Food Inspection Agency;
- (15) "Change Log" means a section in the Design and Operations Report for the Facility that contains a record of each modification that is required to be made to the Design and Operations Report, including the date on which the modification occurred;
- (16) "Company" means 1414229 Ontario Limited operating as Escarpment Renewables, and includes its successors and assignees;
- (17) "DAF" means organic waste matter produced in a dissolved air flotation process used for the treatment of wastewater from facilities where food or feed is processed or prepared;
- (18) "Decommissioning Plan Report" means the decommissioning plan report identified in item 3 of Table 1 of O. Regulation 359/09;
- (19) "Design and Operations Report" means the report entitled "Design and Operations Report, Grimsby Anaerobic Digestion Site, August 26, 2025, GHD";
- (20) "Digestate" is a processed organic waste as defined in Reg. 347 and within the context of this Approval it means the liquid output from the Digestate Storage Tanks and Digestate/Biogas Storage Tank(s);
- (21) "Director" means a person appointed in writing by the Minister of the Environment, Conservation and Parks pursuant to section 5 of the Act as a Director for the purposes of section 47.5 of the Act;

- (22) "District Manager" means the District Manager, of the appropriate local district office of the Ministry where the Facility is geographically located;
- (23) "Equipment" means the equipment described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- (24) "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
- (25) "Exhausted" means the capacity of the activated carbon to adsorb contaminant emissions is reached and the Activated Carbon Adsorption Unit is no longer able to effectively reduce emissions.
- (26) "Facility" means the renewable energy generation facility, including the Equipment located at 424 Sobye Road, Grimsby, Ontario, as described in this Approval and as further described in the Application, to the extent approved by this Approval;
- (27) "Farm Operation" has the same meaning as in Reg. 347;
- (28) "Fertilizer" means any substance or mixture of substances containing nitrogen, phosphorus, potassium or other plant food, that is manufactured, sold or represented for use as a plant nutrient, as defined in the *Fertilizers Act*;
- (29) "Fertilizers Act" means the Fertilizers Act, R.S., 1985, c-F-10, as amended;
- (30) "Final Disposal" within the context of this Approval means land disposal and thermal treatment, both as defined in Reg. 347, and does not include handling, storing, transferring, treating or processing of waste at a land disposal or a thermal treatment site;
- (31) "Financial Assurance" is as defined in Section 131 of the Act;
- (32) "Flare" means the Biogas/RNG flare 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;
- (33) "FOG" means fats, oils and grease (FOG), of plant and animal origin, and accompanying food residuals collected from grease interceptors and/or grease traps at food production, food processing and/or food wholesale and retail facilities;
- (34) "Foreign Matter" within the context of this Approval means materials that include but are not limited to glass, metallic objects, plastic and other foreign objects that are not typically considered naturally occurring;

- (35) "Human Body Waste" means waste derived from or containing wastes from the human body, limited to used diapers, used incontinence products and used sanitary products collected through the municipal source separated waste collection programs;
- (36) "IC&I" means industrial, commercial and institutional;
- (37) "Malfunction" means any sudden, unplanned, infrequent and not reasonably preventable failure of the equipment associated with maintaining or monitoring negative pressure and/or negative air balance in the Organics Receiving Building, excluding failures that may be caused in part by poor maintenance or negligent operation;
- (38) "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;
- (39) "Ministry" means the ministry of the government of Ontario, responsible for the Act and OWRA and includes all officials, employees or other persons acting on its behalf;
- (40) "NASM" or "Non-agricultural Source Material" has the same meaning as in O. Reg. 267/03;
- (41) "NMA" means the *Nutrient Management Act*, 2002, S.O. 2002, c. 4, as amended;
- (42) "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 section 5.2.4 of the Acoustic Assessment Report.
- (43) "O. Reg. 267/03" means Ontario Regulation 267/03 "General" made under the NMA;
- (44) "O. Reg. 359/09" means Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" made under the Act;
- (45) "O. Reg. 419/05" means Ontario Regulation 419/05, Air Pollution Local Air Quality, as amended;
- (46) "Odour Management Plan" means a document which describes the current and planned odour management and control measures of the Facility;
- (47) "Operator" means any person, other than the Company's employees, authorized by the Company as having the charge, management or control of any aspect of the Facility and includes 1414229 Ontario Limited, its successors and assignees;
- (48) "Organic Waste" means solid and liquid non-hazardous organic waste derived from plants or animals, readily biodegradable and suitable for microbial biodegradation conducted under anaerobic conditions, and as further described in Condition 38 of this Approval;

- (49) "Organics Receiving Building" means the enclosed building located at the Facility where the solid Organic Waste is to be received, pre-processed and temporarily stored prior to transfer to the liquid receiving tanks;
- (50) "Original ESDM Report" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by Matthew Griffin, P.Eng. / GHD and dated March 30, 2022 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
- (51) "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
- (52) "PA" means the *Pesticides Act*, R.S.O. 1990, c. P-11, as amended;
- (53) "Phase 0" means the initial phase of the Facility development as approved under this Approval;
- (54) "Phase 1" means the intermediate phase of the Facility development as approved under this Approval;
- (55) "Phase 2" means the final phase of the Facility development as approved under this Approval;
- (56) "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
- (57) "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
- (58) "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
- (59) "Processed Organic Waste" has the same meaning as in Reg. 347;
- (60) "Professional Engineer" means a Professional Engineer as defined within the *Professional Engineers Act, R.S.O. 1990, c. P.28*, as amended;
- (61) "Provincial Officer" means any person designated in writing by the Minister as a provincial officer pursuant to Section 5 of the OWRA, Section 5 of the Act, Section 17 of the PA, Section 4 of the NMA, or Section 8 of the SDWA;
- (62) "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995 as amended.
- (63) "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;
- (64) "Reg. 347" means Regulation 347 "General Waste Management", R.R.O. 1990, made under the Act;

- (65) "Rejected Waste" means the incoming load inadvertently received at the Facility and deemed by the Company to be waste that does not meet the incoming waste quality criteria set out in this Approval or that cannot be processed;
- (66) "Renewable Natural Gas" or "RNG" means the Biogas upgraded in the Biogas-RNG Upgrading System and destined for injection into natural gas distribution infrastructure and/or delivered via mobile, compressed natural gas trailers direct to end users;
- (67) "Residual Waste" means waste resulting from waste management activities at the Facility and destined for further management at an off-site location or Final Disposal. Residual Waste includes, but is not limited to, the heavies which are removed during the visual screening of the waste, the lights which are removed within the Organic Waste de-packaging units, and the grit/scum removed in the grit/skimming systems;
- (68) "Sampling and Analysis Protocol" means the document of that name prepared by the Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment, Conservation and Parks for the purposes of O. Reg. 267/03 and dated July 1, 2021, as amended;
- (69) "SDWA" means Safe Drinking Water Act, 2002, S.O. 2002, c. 32, as amended;
- (70) "Sensitive Receptor" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from odour discharges from the Facility, including one or a combination of:
  - a. private residences or public facilities where people sleep (e.g.: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.);
  - b. institutional facilities (e.g.: schools, churches, community centres, day care centres, recreational centres, etc.),
  - c. outdoor public recreational areas (e.g.: trailer parks, play grounds, picnic areas, etc.), and
  - d. commercial areas where there are continuous public activities (e.g.: commercial plazas and office buildings);
- (71) "Source Separated Organics" or "SSO" has the same meaning as in Ontario Regulation 160/99 "Definitions and Exemptions" made under the *Electricity Act*, 1998;
- "Source Testing" means site-specific sampling and testing to measure emissions resulting from operating the Biofilter, the Liquid Waste Receiving Tanks, the Skimming Building, and the Grit/Skimming Buildings, 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 is capable of, within the approved operating range of the Biofilter, Liquid Waste Receiving Tanks, the Skimming Building, and the Grit/Skimming Buildings which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
- (73) "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;

- (74) "Spill" is as defined in the Act;
- (75) "SRM" means waste that includes, at a minimum, but is not limited to, (a) the skull, brain, trigeminal ganglia, tonsils, spinal cord, and dorsal root ganglia of cattle aged 30 months or older; and (b) the distal ileum of cattle of all ages. SRM may also include other additional materials as defined by the federal Health of Animals Regulations, C.R.C. c. 296, as amended;
- (76) "Substantiated Complaint" means a complaint received either by the Company or the District Manager that has been confirmed by the Ministry, the cause of which is attributed to the Company's activities at the Facility;
- (77) "Trained Personnel" means one or more Facility personnel trained in accordance with the requirements of Condition 48.
- (78) "Trucks" means the reagent truck(s), solid Organic Waste truck(s), liquid Organic Waste truck(s), Residual Waste/Rejected Waste truck(s) and Compressed RNG tube trailer truck(s).

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

### TERMS AND CONDITIONS

#### **GENERAL**

## Compliance

1. The Company shall construct, install, use, operate, maintain and retire the Facility in accordance with the terms and conditions of this Approval and the Application in accordance with the following schedules attached hereto:

Schedule A - Facility Description;

Schedule B - Digestate Storage Volume Requirements;

Schedule C - Groundwater Monitoring Program;

Schedule D - Procedure to Calculate and Record the 10-minute Average

Concentration of Odour;

Schedule E - Source Testing Procedures;

- 2. The Company shall ensure a copy of this Approval is:
  - (1) accessible, at all times, by Company staff operating the Facility and;
  - submitted to the clerk of each local municipality and upper-tier municipality in which the Facility is situated along with the Application.

- 3. If the Company has a publicly accessible website, the Company shall ensure that the Approval and the Application are posted on the Company's publicly accessible website within five (5) business days of receiving this Approval.
- 4. The Company shall ensure compliance with all the conditions of this Approval and shall ensure that any person authorized to carry out work on or operate any aspect of the Facility is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 5. Any person authorized to carry out work on or operate any aspect of the Facility shall comply with the conditions of this Approval.

## Interpretation

- 6. Where there is a conflict between a provision of this Approval and any document submitted by the Company, the conditions in this Approval shall take precedence. Where there is a conflict between one or more of the documents submitted by the Company, the document bearing the most recent date shall take precedence.
- 7. The requirements of this Approval are severable. If any requirement of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this Approval shall not be affected thereby.

## Other Legal Obligations

- 8. The issuance of, and compliance with the conditions of this Approval does not:
  - (1) relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; or
  - (2) limit in any way the authority of the Ministry to require certain steps be taken or to require the Company to furnish any further information related to compliance with this Approval.

# Adverse Effects

- 9. The Facility shall be constructed, installed, used, operated, maintained, and retired in a manner which ensures the health and safety of all persons and does not cause an Adverse Effects.
- 10. The Company shall take steps to minimize and ameliorate any Adverse Effect resulting from the operations at the Facility, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the Adverse Effect.

- 11. Despite the Company or any other person fulfilling any obligations imposed by this Approval, the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the Adverse Effect.
- 12. If at any time odour, pests, litter, dust, noise or other such negative effects are generated at the Facility and cause an Adverse Effect, the Company shall take immediate appropriate remedial action that may be necessary to alleviate the Adverse Effect, including suspension of all waste management activities if necessary.

## Change of Ownership

- 13. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any of the following changes:
  - (1) the ownership of the Facility;
  - (2) the operator of the Facility;
  - (3) the address of the Company;
  - (4) the partners, where the Company is or at any time becomes a partnership and a copy of the most recent declaration filed under the <u>Business Names Act</u>, R.S.O. 1990, c. B.17, as amended, shall be included in the notification;
  - (5) the name of the corporation where the Company is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the *Corporations Information Act*, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.
- 14. No portion of this Facility shall be transferred or encumbered prior to or after closing of the Facility unless the Company or its successor has deposited with the Ministry sufficient financial assurance for the Director to be satisfied that the conditions of this Approval will be complied with.
- 15. In the event of any change in ownership of the Facility, other than a change to a successor municipality, the Company shall notify the successor of and provide the successor with a copy of this Approval, and the Company shall provide a copy of the notification to the District Manager and the Director.

## Inspections by the Ministry

- 16. No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the Act, the PA, the SDWA or the NMA of any place to which this Approval relates, and without limiting the foregoing:
  - (1) to enter upon the premises where the approved processing is undertaken, or the location where the records required by the conditions of this Approval are kept;
  - (2) to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
  - (3) to inspect the Facility, related equipment and appurtenances;
  - (4) to inspect the practices, procedures, or operations required by the conditions of this Approval;
  - (5) to conduct interviews with staff, contractors, agents and assignees of the Company; and
  - (6) to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the Act, the OWRA, the PA, the SDWA or the NMA.

## **Information**

- 17. Any information requested by the Ministry, concerning the operation of the Facility and its operation under this Approval, including but not limited to any records required to be kept by this Approval, manuals, plans, records, data, procedures and supporting documentation shall be provided to the Ministry, immediately upon request.
- 18. The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this Approval or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:
  - (1) an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Approval or any statute, regulation or other legal requirement; or
  - (2) acceptance by the Ministry of the information's completeness or accuracy.

19. The Company shall ensure that a copy of this Approval, in its entirety and including all its notices of amendment, and the Application, are retained at the Facility at all times.

## **Decommissioning and Closure**

- 20. The Company shall, at least six (6) months prior to the anticipated retirement date of the entire Facility, or part of the Facility, review its Decommissioning Plan Report to ensure that it is still accurate. If the Company determines that the Facility cannot be decommissioned in accordance with the Decommissioning Plan Report, the Company shall provide the Director and District Manager a written description of plans for the decommissioning of the Facility.
- 21. The Facility shall be retired in accordance with the Decommissioning Plan Report and any directions provided by the Director or District Manager.
- 22. Within ten (10) days after closure of the Facility, the Company shall notify the Director and District Manager, in writing, that the Facility is closed and that the Facility Decommissioning Plan Report has been implemented.

### EXPIRY OF APPROVAL

- 23. (1) Prior to receiving the waste quantity and types set out in Condition 38(4) for Phase 1, the Company shall construct and install the processes, working areas and supporting units described under Phase 1 in Schedule A.
  - (2) Phase 1 of the Facility shall be constructed and the approved processes, working areas and supporting units shall be installed and must commence operation, as set out in Condition 23(1), within five (5) years of issuance of this Approval, after which time the Approval for Phase 1 ceases to apply if the Facility has not been constructed and installed in accordance with Condition 23(1). In the event that the construction, installation and/or operation of any portion of Phase 1 of the Facility is anticipated to be delayed beyond the time period stipulated, the Company shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).
  - (3) Notwithstanding Conditions 23(1) and (2), the Company may commence Phase 1 without the construction, installation and commencement of the Digestate/Biogas Storage Tank required for Phase 1 under Schedule A, provided that:
    - (a.) the Company satisfies the requirements set out under Condition 41(34);

and

- (b.) the Phase 1 Digestate/Biogas Storage Tank is constructed prior to receiving the waste quantity set out in Condition 38(4) for Phase 2 or within ten (10) years of issuance of this Approval, whichever occurs first.
- (4) Prior to receiving the waste quantity and types set out in Condition 38(4) for Phase 2, the Company shall construct and install the processes, working areas and supporting units described under Phase 2 in Schedule A.
- (5) The Facility shall be constructed and the approved processes, working areas and supporting units shall be installed and must commence operation, as set out in Condition 23(4), within ten (10) years of issuance of this Approval, after which time the Approval for Phase 2 ceases to apply if the Facility has not been constructed and installed in accordance with Condition 23(4). In the event that the construction, installation and/or operation of any portion of Phase 2 of the Facility is anticipated to be delayed beyond the time period stipulated, the Company shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).
- (6) Within thirty (30) calendar days of commencement of construction of each phase, the Company shall prepare and submit to the District Manager a schedule for the completion of construction and commissioning operation of the Facility. The Company shall notify the District Manager within thirty (30) days of the commissioning operation of each phase of the Facility. Upon completion of construction of each phase of the Facility, the Company shall prepare and submit a statement to the District Manager, certified by a Professional Engineer, that the Facility is constructed in accordance with this Approval.
- (7) Prior to the construction of each phase, the Company shall prepare an update to the Design and Operations Report to add the required technical information on the proposed design and to track the design changes through the update in the Change Log section. All supporting information including technical memorandum, engineering plans and specifications, as applicable and appropriate to support the declarations that the design conforms with Conditions 23(1), (3) and (4) shall remain on-site for future inspections.
- 24. (1) A set of as-built drawings, certified by a Professional Engineer and showing the design of the Facility, shall be kept at the Facility at all times.

#### WATER TAKING

- 25. (1) The Company shall not take more than 50,000 litres of water on any day, by any means during the construction, installation, use, operation, maintenance, and retiring of the Facility.
  - (2) If any dewatering is undertaken during construction the water shall be directed into the sedimentation pond before discharging it offsite.

### ARCHAEOLOGICAL RESOURCES

26. If archaeological resources are discovered, the Company shall immediately contact any authorities it is legally obligated to contact, and shall notify the Director as soon as reasonably possible.

#### AIR AND NOISE CONDITIONS

## **ODOUR CONTROL MEASURES**

- 27. (1) The Company shall take measures to minimize odourous emissions from all potential sources at the Facility.
  - (2) The Company shall ensure that:
    - (a.) the Organics Receiving Building is designed and constructed such that the potential for air leakages from the Organics Receiving Building is minimised:
    - (b.) the Organics Receiving Building is operated and maintained at a negative pressure environment, such that all potentially process-related odourous air is collected and treated using the fully functional Biofilter;
    - (c.) all aspects of solid Organic Waste receiving and pre-processing are undertaken within the confines of the Organics Receiving Building, as approved in this Approval;
    - (d.) all vehicles hauling waste to and from the Facility are in covered/enclosed vehicles to prevent fugitive odour and dust emissions during transport;
    - (e.) the Organic Waste is processed in the approximate order of receipt;
    - (f.) all windows and doors in the Organics Receiving Building are kept closed at all times, except when the doors are used for necessary

- personnel and/or vehicle entrance and exit;
- (g.) the six (6) bay doors in the Organics Receiving Building are fast acting doors design;
- (h.) the one (1) dock-level bay is fitted and operated with a dock seal to minimize the escape of odours emissions when packaged waste is being loaded;
- (i.) only one (1) of the three (3) loading/unloading doors (2 bay doors and 1 dock-level bay) in the processing area of the preprocessing building is opened at any one time, and only one (1) of the four (4) loading/unloading doors (4 bay doors) in the receiving area of the preprocessing building are opened at any one time;
- (j.) the Organics Receiving Building is equipped with negative pressure differential sensor(s) at a location(s) appropriate to avoid atmospheric interference;
- (k.) the opening and closing of the seven (7) loading/unloading 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 Organics Receiving Building;
- (l.) the fans associated with the ventilation system in the Organics Receiving Building is equipped with an alarm for loss of suction, which is integrated to the SCADA system to indicate system failure and prompt the seven (7) loading/unloading doors to remain in closed position;
- (m.) the Organics Receiving Building is maintained, at all times, excluding any time periods of Malfunction, under adequate negative pressure (rolling arithmetic average over 30 minute period) as compared to the ambient atmospheric pressure, at a magnitude sufficient enough to prevent:
  - (i.) a migration of the fugitive odour emissions from the Organics Receiving Building to any off-site Sensitive Receptor location; or
  - (ii.) an occurrence of an adverse effect and/or complaints from the public being affected by the said migration of the fugitive odour emissions from the Organics Receiving Building;

- (n.) the negative pressure and negative air balance for the Organics
  Receiving Building are monitored and recorded every five minutes
  (rolling arithmetic average over 30 minute period), utilizing negative
  pressure and negative air balance data every second;
- (o.) 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 Organics 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 Site and submit to the District Manager, a daily written report within one (1) week of losing the negative pressure (rolling arithmetic average over 30 minute period) or negative air balance (rolling arithmetic average over 30 minute period), identifying all possible causes for losing the negative pressure (rolling arithmetic average over 30 minute period) or negative air balance (rolling arithmetic average over 30 minute period), actions taken to resolve the identified cause(s) and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents;
- (p.) the passive exhausts from the two (2) Pasteurization Systems are discharged to the air, at all times, through the fully functional Activated Carbon Adsorption Units approved under this Approval;
- (q.) the passive exhausts from the three (3) Liquid Waste Receiving Tanks are discharged to the air, at all times, through the fully functional Activated Carbon Adsorption Units approved under this Approval, except when the tank is being filled using a dump trailer;
- (r.) only one (1) of the three (3) Liquid Waste Receiving Tanks is opened at any one time for receiving liquid organic waste and that the tank is

- resealed as soon as possible, upon receiving liquid waste using a dump trailer; and
- (s.) all truck loading of the Digestate is undertaken via a camlock connection or overhead fill station within the Digestate Loading Station.

# **ODOUR MANAGEMENT PLAN**

- 28. (1) The Company shall operate the Facility at all times in accordance with the most recent version of the Odour Management Plan.
  - (2) The Company shall submit to the District Manager for review, an Odour Management Plan that describes the operations of the Facility and the odour control measures in place and planned for the Facility no later than six (6) months from the date of this Approval.
  - (3) The Odour Management Plan shall include the following:
    - (a.) Facility and process descriptions including but not limited to normal and transient operations, start-up and shutdown, foreseeable maloperations and upsets, and unforeseen upsets which occurred, and sources of odour emissions associated with these operations; and
    - (b.) best management practices developed in accordance with the Ministry's Technical Bulletin on Best Management Practices for Industrial Sources of Odour and adopted in the Facility.
  - (4) The Company shall update and revise the Odour Management Plan three (3) months prior to the implementation of any proposed modifications that may impact odour emissions, and if directed or agreed to in writing by the District Manager.
  - (5) The Company shall maintain the updated Odour Management Plan at the Facility and make it available to the Ministry staff upon request.

## **AIR POLLUTION CONTROL EQUIPMENT**

### Activated Carbon Adsorption Units

29. (1) The Company shall monitor the operational parameters of the Activated Carbon Adsorption Units, either as specified in the manual of the Activated Carbon Adsorption Units manufacturer, or as deemed necessary in accordance with Facility operational conditions. The results of monitoring these parameters shall be manually or digitally recorded in a log.

(2) The Company shall ensure that the activated carbon in the Activated Carbon Adsorption Units is replaced before it is Exhausted.

## Flare System

- The Company shall ensure that the 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 Flare system as a fully functional standby system, so that in the instance of a process/equipment upset, planned maintenance period or when the Renewable Natural Gas that is out of compliance with the required quality criteria for the natural gas distribution infrastructure, the Flare is utilized to combust the Biogas.

## Biofilter

- 31. (1) The Company shall maintain the Biofilter with an empty bed residence time of:
  - (a.) at least 60 seconds, if operated with an organic media; or
  - (b.) at least 35 seconds, if operated with an inorganic media.
  - (2) The Company shall monitor and record the following physical parameters of the Biofilter, through a combination of sensors, meters and physical probes, at frequencies as recommended by the Equipment suppliers:
    - (a.) process air flow through each cell;
    - (b.) differential pressure across media bed in each cell;
    - (c.) media temperature in each cell;
    - (d.) inlet air temperature (after the wet water scrubber);
    - (e.) inlet air relative humidity (after the wet water scrubber);
    - (f.) water flow through the wet scrubber;
    - (g.) water pressure and flow, at irrigation supply to each cell;
    - (h.) moisture content of media in each cell; and
    - (i.) media pH in each cell.

(3) The Company shall perform a quarterly review of the operational data of the Biofilter, including an analysis of parameter trends and their comparison to the design levels, and prepare a report not later than four (4) weeks after the end of the previous quarter and make the report available for inspection by staff of the Ministry upon request.

# VENTILATION ASSESSMENT REQUIREMENTS

- 32. (1) The Company shall develop and submit to the District Manager a negative pressure assessment plan, prepared by a Professional Engineer, not later than six (6) months prior to the receipt of any Organic Waste (approved for Phase 1) in the Organics Receiving Building, or as directed or agreed to in writing by the District Manager, for performing negative pressure assessment for the Organics Receiving Building to identify ideal methodology for achieving and monitoring negative pressure. The plan shall include as a minimum, but not limited to, the following:
  - (a.) drawings showing:
    - (i.) layout of the Facility;
    - (ii.) identification of enclosures, if required; and
    - (iii.) proposed locations for the pressure monitoring sensors for each enclosure;
  - (b.) details of the monitoring instruments;
  - (c.) identification of:
    - (i.) pressure monitoring sensor technology, numbers and location of negative pressure monitoring sensors within the Organics Receiving Building to avoid false positive readings;
    - (ii.) weather and other atmospheric impacts; and
    - (iii.) ideal target negative pressure and negative air balance for the Organics Receiving Building, including the need to install any additional fans required to maintain the target negative pressure and negative air balance within the Organics Receiving Building;
  - (d.) impacts of the seven (7) loading/unloading doors operating practice at maximum Organic Waste receipt rates;

- (e.) air changes in the Organics Receiving Building with a recommendation of minimum air exchanges;
- (f.) instrument calibration schedule;
- (g.) data collection, logging and reporting frequency;
- (h.) alarm levels and triggers;
- (i.) consideration of remedial actions if an alarm is triggered;
- (j.) an evaluation of the negative pressure and air balance inside the Organics Receiving Building;
- (k.) the monitoring period duration for the negative pressure assessment for the Organics Receiving Building;
- (l.) frequency and methodology for performing the negative pressure assessment;
- (m.) smoke test;
- (n.) detailed evaluation of the SCADA system, including adequacy and accuracy;
- (o.) notification requirement to the District Manager; and
- (p.) reporting, including an analysis of the results and recommendations.
- (2) The Company shall conduct the negative pressure assessment for the Organics Receiving Building, not later than three (3) months after acceptance of the negative pressure assessment plan by the District Manager, 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 Organics Receiving Building to the Director and the District Manager within two (2) months after completing the negative pressure assessment.
- (4) The Company shall implement the recommendations identified in the negative pressure assessment report within six (6) months after completing the negative pressure assessment, or as directed or agreed to in writing by the District Manager.

# NOISE PERFORMANCE REQUIREMENTS

- 33. (1) The Company shall:
  - (a) implement, prior to the commencement of operation of the RNG upgrading Facility operations, the Noise Control Measures outlined in section 5.2.4 of the Acoustic Assessment Report;
  - (b) at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300; and
  - (c) ensure that the Noise Control Measures are properly maintained and continue to provide the acoustical performance outlined in the Acoustic Assessment Report.

## ORGANIC WASTE MANAGEMENT

### <u>GENERAL</u>

#### **Build** in Accordance

- 34. (1) Except as otherwise provided by this Approval, the Facility shall be designed, developed, built, operated and maintained in accordance with the Application.
  - (2) Any design optimization or modification that is inconsistent with the conceptual design set out in the Application shall be clearly identified, along with an explanation of the reasons for the change, and submitted to the Director for approval and a copy to the District Manager.

## Design and Operations Report

35. (1) The most updated Design and Operations Report shall be retained on-site at all times.

#### Financial Assurance

- 36. (1) The Company shall maintain with the Ministry, Financial Assurance, as defined in Section 131 of the EPA, in the amount of \$290,902. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Facility clean-up and disposal of all approved quantities of waste during the Phase 0 operation of the Facility, at any one time.
  - (2) A minimum of thirty (30) days prior to the receipt of the quantity of Organic Waste approved for Phase 1, the Company shall submit to the Director, the

additional Financial Assurance for the amount of \$330,488.00 for a total Financial Assurance amount of \$621,390.00. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Facility clean-up and disposal of all approved quantities of waste during the Phase 1 operation of the Facility, at any one time.

- (3) A minimum of thirty (30) days prior to the receipt of the quantity of Organic Waste approved for Phase 2, the Company shall submit to the Director, Financial Assurance, as defined in Section 131 of the Act, for the amount of \$271,299.95 for a total Financial Assurance amount of \$892,689.98. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Facility clean-up and disposal of all approved quantities of waste during the Phase 2 operation of the Facility, at any one time.
- (4) Commencing on September 30, 2030 and at intervals of five (5) years thereafter, the Company shall submit to the Director, a re-evaluation of the amount of Financial Assurance to implement the actions required under Conditions 36(1), (2) and (3). The re-evaluation shall include an assessment based on any new information relating to the environmental conditions of the Facility and shall include the costs of additional monitoring and/or implementation of contingency plans required by the Director upon review of the closure plan and annual reports. The Financial Assurance must be submitted to the Director within thirty (30) calendar days of written acceptance of the re-evaluation by the Director.
- (5) The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion. If any Financial Assurance is scheduled to expire or notice is received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial Assurance at least sixty (60) days before the Financial Assurance terminates, the Financial Assurance shall forthwith be replaced by cash.

## Complaints Response Procedure

- 37. (1) A designated representative of the Company shall be available to receive public complaints caused by the operations at the Facility twenty-four (24) hours per day, seven (7) days per week.
  - (2) If at any time, the Company receives any environmental complaints from the public regarding the operation of the Facility, the Company shall respond to these complaints according to the following procedures:
    - (a.) Step 1: Receipt of Complaint The Company shall record each complaint in a computerized tracking system. The information recorded

shall include the following:

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

follow-up response would be provided.

- (e.) Step 5: Recording All of the information collected and actions taken must be recorded in the tracking system.
- (3) If the District Manager deems the remedial measures taken as per Condition 37(2)(c.) to be unsuitable, insufficient or ineffective, the District Manager may direct the Company, in writing, pursuant to the remedial order section (s.17) or the preventative measures order section (s.18) of the Act to take further measures to address the noted failure, upset or malfunction, including but not limited to the following:
  - (a.) reduction in the receipt of the waste;
  - (b.) cessation of the receipt of the waste;
  - (c.) removal and off-site disposal of waste; and
  - (d.) repairs or modifications to the Equipment or processes at the Facility.

# SERVICE AREA, WASTE TYPES, RECEIPT RATES, STORAGE AND PROCESSING

## Service Area & Waste Types

- 38. (1) The Company shall only accept waste generated in the Province of Ontario.
  - (2) The operation of this Facility is limited to the receipt and processing of the following waste types:
    - (a.) Organic Waste from the following IC&I sources:
      - (i.) bakeries;
      - (ii.) confectionary processing facilities;
      - (iii.) dairies and facilities that process dairy products;
      - (iv.) fruit and vegetable processing facilities;
      - (v.) fruit and vegetable packing facilities;
      - (vi.) cereal and grain processing facilities;
      - (vii.) oil seed processing facilities;
      - (viii.) food manufacturing facilities;
      - (ix.) food processing facilities;
      - (x.) grocery stores;
      - (xi.) food distribution companies;
      - (xii.) beverage manufacturing facilities;
      - (xiii.) beverage distribution facilities;

- (xiv.) breweries and distillers grain;
- (xv.) wineries;
- (xvi.) milling facilities;
- (xvii.) pet food manufacturing;
- (xviii.)production of ethanol or biodiesel;
- (xix.) greenhouses, nurseries, garden centers and flower shops, limited to herbaceous plant material; and
- (xx.) those not listed in this condition of the Approval, but for which the Company has at least three (3) days prior to accepting the Organic Waste at the Facility:
  - (1) implemented Organic Waste verification procedures consisting of, but not limited to, the following:
    - (a.) consulted with subject matter experts, including the Ministry, as necessary, to understand and verify the effect of the Organic Waste on the processes occurring at the Facility; and/or
    - (b.) conducted a scientific literature review to prove the effective anaerobic digestion capabilities of the Organic Waste along with other types of Organic Waste in the processes approved under this Approval;
  - (2) provided notification to the District Manager with details on the Organic Waste verification procedures in Condition 38(2)(a.)(xx.)(1), the Organic Waste content, the generator of the waste, and impacts to the processes approved under this Approval and the environment. If the Organic Waste verification procedures indicate that the processing of the Organic Waste may negatively impact the performance of the biofilter or anaerobic digestion process, the Company shall not accept that Organic Waste type at the Facility.
- (b.) SSO, limited to the following:
  - (i.) During Phase 0, pre-processed SSO generated from a mixture of residential (domestic) curbside collection programs and IC&I sources, and that may contain soiled diapers, soiled incontinence products, soiled sanitary products and pet wastes;
  - (ii.) During Phases 1 and 2, SSO (pre-processed or raw) generated from a mixture of residential (domestic) curbside collection programs and IC&I sources, and that may contain soiled diapers, soiled incontinence products, soiled sanitary products and pet wastes;
- (c.) biosolids, which within the context of this Approval mean the organic materials resulting from the aerobic digestion or anaerobic digestion of

- sewage sludge generated at municipal wastewater treatment plants; and
- (d.) Organic Waste from agricultural sources, limited to: livestock, fish, paunch manure, grape pomace, corn silage, silage of all types of grasses, aquatic plants, manure, and fruit and vegetable wastes.
- (3) The Facility is not approved to receive the following waste types:
  - (a.) any waste that is classified as hazardous waste in accordance with Reg. 347;
  - (b.) any waste that is classified as "Specified Risk Materials" which has the same meaning as in section 6.1 of the Health of Animals Regulations (C.R.C., c. 296), made under the *Health of Animals Act* (S.C. 1990, c. 21), as amended;
  - (c.) any untreated septage as defined in O. Reg. 267/03 or hauled sewage as defined in Reg. 347;
  - (d.) any sewage sludge, which within the context of this Approval means the organic materials resulting from treatment of sewage up-to the anaerobic digestion processing step at sewage works, where the sewage works is subject to the requirements under the OWRA and,
    - (i.) means any works for the collection, transmission, treatment and disposal of sewage or any part of such works, but does not include plumbing to which the *Building Code Act*, 1992 applies; and
    - (ii.) is owned by a municipality;
    - (iii.) is owned by the Crown or the Ontario Clean Water Agency, subject to an agreement with a municipality under the OWRA; or
    - (iv.) receives only waste similar in character to the residential (domestic) sewage from a household;
  - (e.) dedicated loads of soiled diapers, soiled incontinence products, soiled sanitary products and pet waste from the IC&I sources; and
  - (f.) any IC&I waste that does not meet the definition of the Organic Waste.

### Receipt Rates and Storage Limits

(4) At the Facility, the Company is approved to receive Organic Waste in

quantities that are not to exceed:

- (a.) for Phase 0:
  - (i.) a maximum of 220 tonnes per day of Organic Waste; and
  - (ii.) a maximum of 33,000 tonnes per year of the Organic Waste;
- (b.) for Phase 1:
  - (i.) a maximum of 790 tonnes per day of the Organic Waste;
  - (ii.) a maximum of 120,000 tonnes per year of the Organic Waste;
  - (ii.) a maximum of 159,000 tonnes per year of the Organic Waste;
- (c.) for Phase 2:
  - (i.) a maximum of 1,050 tonnes per day of the Organic Waste;
  - (ii.) a maximum of 159,000 tonnes per year of the Organic Waste;
- (5) The Company is approved to store waste as follows:
  - (a.) Under Phases 0, 1 and 2, a maximum of 1,479 tonnes of liquid Organic Waste, Organic Waste paste, and Organic Waste slurry shall be temporarily stored in the three (3) Liquid Receiving Tanks at any time;
  - (b.) For Residual Waste:
    - (i.) Under Phase 0, a maximum of 4 tonnes of grit/scum Residual Waste shall be temporarily stored within the designated bin in the Skimming Building and a maximum of 12 tonnes of grit/scum Residual Waste shall be temporarily stored within covered and leak-free bins outdoors, at any time;
    - (ii). Under Phase 1, a maximum of 4 tonnes of grit/scum Residual Waste shall be temporarily stored within the designated bin in the Skimming Building and a maximum of 7 tonnes of grit/scum Residual Waste shall be temporarily stored within the designated bunker in the Grit/Skimming Building, at any time; and
    - (iii.) Under Phase 2, a maximum of 4 tonnes of grit/scum Residual Waste shall be temporarily stored within the designated bin in the Skimming Building 1, a maximum of 7 tonnes of grit/scum Residual Waste shall be temporarily stored within the designated bunker in each of the Grit/Skimming Buildings (14 tonnes of grit/scum storage in total), at any time;
  - (c.) For Digestate:
    - (i.) Under Phase 0, a maximum of 8,058 cubic metres of Digestate shall be stored within the Digestate Storage Tanks at any time;

- (ii.) Under Phase 1, a maximum of 16,058 cubic metres of Digestate shall be stored within the Digestate Storage Tanks and the Digestate/Biogas Storage Tank at any time; and
- (iii.) Under Phase 2, a maximum of 24,058 cubic metres of Digestate iii. shall be stored within the Digestate Storage Tanks and the Digestate/Biogas Storage Tank(s) at any time;

## (d.) Under Phases 1 and 2:

- (i.) a maximum of 1,217 tonnes of the solid Organic Waste and a maximum of 3.5 tonnes of the heavy Residual Waste (i.e., the waste resulting from the visual inspection screening of the Organic Waste on the tipping floor) shall be temporarily stored in the Waste Receiving Area within the Organic Receiving Building at any time;
- (ii.) a maximum of 38 tonnes of the dewatered, solid Residual Waste, including the heavies, lights, grit and scum, shall be temporarily stored in each of the two (2) Residual Waste Storage Trailers within the Organics Receiving Building at any time;
- (iii.) a maximum of 120 square metres of cleaned and empty IC&I waste containers (including totes, pallets, carts and bins) shall be stored in the designated storage area in the Organics Pre-Processing Area within the Organics Receiving Building as shown in the supporting documentation listed in the attached Schedule A, in a van trailer or outdoors; and
- (iv.) spent activated carbon in a covered, leak-free bin;

## (e.) For Biogas:

- (i.) Under Phase 0, a maximum of approximately 884 cubic metres of Biogas shall be stored within the Biogas Storage Bladder at any time;
- (ii.) Under Phase 1, a maximum of approximately 10,500 cubic metres of Biogas shall be stored within the Digestate/Biogas Storage Tank at any time; and
- (iii.) Under Phase 2, a maximum of approximately 21,000 cubic metres of Biogas shall be stored within the Biogas Storage Bladder and/or the Digestate/Biogas Storage Tank(s) at any time;

- (f.) Under Phases 1 and 2, Renewable Natural Gas within a maximum of two (2) portable tube trailers.
- (6) No waste (including Organic Waste, Digestate, Residual Waste, Rejected Waste, Biogas and RNG) shall be stored at any part of the Facility other than those identified in Condition 38(5) at any time.
- (7) The Company shall ensure that:
  - (a.) during normal operations, the solid Organic Waste stored in the Organic Receiving Building shall be processed within forty eight (48) hours from the time of its receipt OR on the next business day following a weekend or statutory holiday should the waste be received on the business day prior to said weekend or statutory holiday; and
  - (b.) the solid Organic Waste processing is scheduled so that the oldest Organic Waste is processed first.
- (8) During Phases 1 and 2, the Residual Waste shall be transferred from the Facility to an approved waste disposal site as soon as its transfer trailer is filled to its holding capacity.
- (9) No outside Organic Waste storage is approved under this Approval.
- (10) No storage of incoming Organic Waste in its transportation vehicle is approved under this Approval.
- (11) In the event that Organic Waste cannot be processed at the Facility and the Facility is at its approved waste storage capacity, the Company shall cease accepting additional Organic Waste. Receipt of additional waste may be resumed once such receipt complies with the waste storage limits approved in this Approval.

# Waste Management Activities

- (12) The following Organic Waste management activities are approved under this Approval:
  - (a.) receipt and temporary storage of the liquid Organic Waste in the Liquid Receiving Tanks at the Liquid Unloading Station;
  - (b.) receipt of bulk Organic Waste via the four (4) receiving bays within the Organics Receiving Building;
  - (c.) receipt of packaged Organic Waste via the one (1) dock-level receiving bay within the Organics Receiving Building;
  - (d.) temporary storage and sorting of Organic Waste and heavy Residual

- Waste in the Waste Receiving Area within the Organics Receiving Building;
- (e.) indoor transfer of the Organic Waste from the Waste Receiving Area to the Pre-Processing Area within the Organics Receiving Building via a front-end loader/grapple, hoppers and enclosed conveyors;
- (f.) indoor transfer of the heavy Residual Waste from the Waste Receiving Area to the Pre-Processing Area within the Organics Receiving Building;
- (g.) dewatering of the Residual Waste to generate:
  - (i.) dewatered Residual Waste for transfer to the Residual Waste storage trailers within the Organics Receiving Building via enclosed conveyers; and
  - (ii.) liquid Organic Waste for transfer to the Liquid Receiving Tanks via a pump and forcemain;
- (h.) temporary storage of the dewatered Residual Waste in the Residual Waste storage trailers within the Organics Receiving Building;
- (i.) processing of the Organic Waste in the Organic Waste de-packaging unit(s) within the Organics Receiving Building to separate/remove the light Residual Waste and to generate an Organic Waste paste;
- (j.) transfer of the Organic Waste paste to the Liquid Receiving Tanks via an enclosed conveyance system OR to one (1) trailer within the Organics Receiving Building via enclosed conveyers for removal off-site;
- (k.) mixing of the Organic Waste paste with the liquid Organic Waste in the Liquid Receiving Tanks to generate an Organic Waste slurry;
- (1.) transfer of the Organic Waste slurry:
  - (i.) For Phase 0: to the Pasteurization System for any slurry which requires pasteurization prior to transfer to the Anaerobic Digesters, or directly to the Anaerobic Digesters if pasteurization is not required; and
  - (ii.) For Phases 1 and 2: to the Pasteurization System (for heating and/or pasteurization) or directly to the Anaerobic Digesters;
- (m.) Anaerobic Digestion of the Organic Waste slurry in the Anaerobic Digesters to generate Digestate and Biogas;
- (n.) Transfer of the swept and skimmed Digestate to the grit/skimming separators within the Skimming Building and Grit/Skimming Buildings to generate:
  - (i.) dewatered grit/scum Residual Waste for temporary storage within the Skimming Building and Grit/Skimming Buildings; and
  - (ii.) Digestate for transfer to the Anaerobic Digesters and/or the Digestate Storage Tanks via a pump and forcemain;
- (o.) During Phase 0, transfer of the grit/scum Residual Waste from the

- Skimming Building to the outdoor temporary storage for removal off-site;
- (p.) During Phases 1 and 2, transfer of the grit/scum Residual Waste from the Skimming Building and Grit/Skimming Buildings to the Pre-Processing Area within the Organics Receiving Building via enclosed bins/buckets outdoors for further dewatering and temporary storage;
- (q.) sampling and analysis of the Digestate in the Digestate Storage Tanks, and transfer of Digestate from the Digestate Storage Tanks to the Digestate/Biogas Storage Tank(s);
- (r.) if required during Phases 1 and 2, pasteurization of the Digestate in the Digestate Storage Tanks and the Digestate/Biogas Storage Tank(s) via heating of the tanks;
- (s.) temporary storage of spent activated carbon within a covered bin prior to it's transfer off-site in accordance with Reg. 347; and
- (t.) loading of Digestate into tanker trucks at the Digestate Loading Station via a camlock connections or an overhead fill station for shipment from the Facility.
- (13) The following Biogas management activities are approved under this Approval:
  - (a.) transfer of the Biogas from Anaerobic Digesters and the Digestate Storage Tanks to the Biogas Storage Bladder and/or the Digestate/Biogas Storage Tank(s);
  - (b.) transfer of the Biogas for:
    - (i.) pre-treatment and upgrading of the Biogas in the Biogas-RNG Upgrading System to generate Renewable Natural Gas;
    - (ii.) pre-treatment of the Biogas in the Biogas-CHP Treatment System for use in the Combined Heat and Power engine to generate heat and electricity;
    - (iii.) emergency flaring of the Biogas or emergency flaring of the Renewable Natural Gas;
  - (c.) transfer of the Renewable Natural Gas to compressors for:
    - (i.) temporary storage in tube trailers at the Facility prior to removal off-site; or
    - (ii.) injection of Renewable Natural Gas into the natural gas infrastructure.

### **SIGNS**

- 39. (1) The Company shall update and maintain a sign posted at the entrance to the Facility. The sign shall be visible from the main road leading to the Facility. The following information shall be included on the sign:
  - (a.) name of the Company;

- (b.) this Approval number;
- (c.) hours during which the Facility is open;
- (d.) Organic Waste types that are approved to be accepted at the Facility;
- (e.) Company's telephone number (a hotline) to which complaints may be directed:
- (f.) Company's twenty-four hour emergency telephone number (if different from above);
- (g.) a warning against unauthorized access;
- (h.) a warning against dumping outside the Facility.
- (2) The Company shall ensure that appropriate signs are posted at the Facility clearly identifying the Organic Waste and stating warnings about the nature of the Organic Waste and any possible hazards.
- (3) The Company shall install and maintain appropriate and visible signs at the Facility to direct vehicles to the waste, including the Organic Waste receiving areas and the Digestate and the Residual Waste removal areas.

## **FACILITY SECURITY**

- 40. (1) The Company shall ensure that all waste processing, loading, unloading and transfer to or from vehicles/containers at the Facility are supervised at all times by Trained Personnel.
  - (2) The Company shall ensure that access to the Facility is regulated and that all entrances are secured by lockable gates to restrict access only to authorized personnel when the Facility is not open.
  - (3) The Company shall ensure the Facility is operated in a safe and secure manner, and that all waste is properly handled, contained or stored so as not to pose any threat to the general public and the Facility personnel.

## **FACILITY OPERATIONS**

- 41. (1) (a.) The Facility is approved to receive waste from 7 am to 7 pm Monday to Saturday, to ship waste from 5 am to 9 pm Monday to Saturday, and to operate 24/7/365, unless otherwise limited by municipal by-laws.
  - (b.) With the prior written approval from the District Manager and under the supervision of Trained Personnel, the Facility may temporarily receive waste outside of the approved hours of waste receipt, with all variances recorded in the Annual Report.
  - (2) No sorting, source separating or unpacking of the Organic Waste shall be conducted at the Facility during Phase 0.

- (3) Incoming Organic Waste receipt:
  - (a.) The Company shall inspect all incoming Organic Waste loads and the accompanying waste characterization documentation to ensure that only the waste that is approved under this Approval is received at the Facility.
  - (b.) The incoming Organic Waste that has not been characterized in accordance with this Approval or that is not accompanied by the required documentation shall not be accepted at the Facility and shall immediately be directed off-site.
  - (c.) The Company shall establish and implement a waste screening and tracking system for all Organic Waste received, processed, stored at and transferred from the Facility.
  - (d.) Upon arriving at the Facility, the solid Organic Waste shall be forthwith unloaded within the confines of the Organics Receiving Building.
  - (e.) All sorting of the incoming solid Organic Waste at the Facility shall be undertaken indoors, within the confines of the Organics Receiving Building.
- (4) In the event that a load of solid waste that does not meet the quality criteria from this Approval is inadvertently accepted in the Organics Receiving Building, the Company shall ensure that this Rejected Waste:
  - (a.) is handled and removed from the Facility in accordance with Reg. 347 and the Act:
  - (b.) is separated from the solid Organic Waste approved for receipt;
  - (c.) is stored within the confines of the Organics Receiving Building at all times; and
  - (d.) is removed from the Facility:
    - (i) within forty eight (48) hours of its receipt;
    - (ii) on the next business day following a weekend or statutory holiday should the Rejected Waste be received on the business day prior to the said weekend or statutory holiday; or
    - (iii) as acceptable to the District Manager.
- (5) In the event that a load of liquid waste that does not meet the quality criteria from this Approval is inadvertently accepted at the Facility and is mixed with the approved Organic Waste in a Liquid Waste Receiving Tank, the Company shall consider the content of the Liquid Waste Receiving Tank as Rejected Waste and:
  - (a.) ensure that this Rejected Waste is handled and removed from the Facility in accordance with the Emergency Response and Contingency Plan: or
  - (b.) if accepted by the District Manager, ensure that a composite sample of the Rejected Waste in the said Liquid Waste Receiving Tank has been

collected and analysed for metals listed in column 1 of Table 2 of Schedule 5 of O. Reg. 267/03, in accordance with the requirements specified in this Approval prior to transfer out of the said Liquid Waste Receiving Tank. Should results of testing of the incoming Organic Waste for metals fail to meet the maximum metal concentration set out in Condition 43(3), the Company shall ensure that this Rejected Waste is handled and removed from the Facility in accordance with the Emergency Response and Contingency Plan, Reg. 347 and the Act.

- (6) In the event of the receipt of the Rejected Waste, a record shall be made in the daily log book or in an electronic file of the reason why the waste is being refused and of the origin of the waste.
- (7) The District Manager shall be notified in writing of the receipt of the Rejected Waste within three (3) business days. The notice shall include, at a minimum, the following information:
  - (a.) quantity and type of the waste;
  - (b.) source of the waste;
  - (c.) reason why the waste is deemed as Rejected Waste;
  - (d.) final destination of the Rejected Waste, if known; and
  - (e.) time and date of receipt and time and date of removal from the Facility; and
  - (f.) any sampling results which confirmed that the liquid Rejected Waste can be processed under Condition 41(5), including the date and time of sampling, and the date and time the sampling results were received.

#### Tanks

- (10) The Company shall ensure that sufficient storage capacity is available in the storage/processing tanks prior to loading of the tanks.
- (11) The Company shall,
  - (a.) install, operate and maintain **all** storage and processing tanks with a liquid level monitoring devices;
  - (b.) monitor and control the liquid levels and loading rates in all storage and processing tanks on a continuous basis to ensure that the design storage capacity available within the tanks is not exceeded; and
  - (c.) install, operate and maintain a high-level alarm at the Facility and a remote alarm to the dedicated Trained Personnel, that triggers when the high level setpoint in any storage/processing tanks is reached.

## Spill Containment

(12) All liquid waste and chemicals shall be handled and stored in accordance with

- the Ministry's "Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities" dated May 2007.
- (13) The Phase 1 and 2 Anaerobic Digesters, Digestate Storage Tanks and Digestate/Biogas Storage Tank(s) shall be constructed within an impermeable secondary spill containment area with a minimum spill containment volume of 8,441 cubic metres, as set out in the supporting documentation listed in the attached Schedule A.
- (14) The outdoor loading and unloading areas for the transfer of liquids into and from the storage tanks shall be constructed such that any spill during loading/unloading would be collected and contained on-site, as set out in the supporting documentation listed in the attached Schedule A.
- (15) The Company shall ensure that a drip tray is placed under the cam-lock connection when liquids are being loaded into the tanker trucks.

## Solid Organic Waste Pre-processing

(16) All pre-treatment of solid Organic Waste shall be carried out within the confines of the Organics Receiving Building.

## Pasteurization During Phase 0

- (17) During Phase 0 and whenever the Pasteurization Systems are utilized for pasteurization, the Company shall:
  - (a.) designate a minimum of one (1) Liquid Receiving Tank for the receipt of Organic Waste that requires pasteurization to prevent cross-contamination of pathogens;
  - (b.) ensure that all paunch manure; DAF; FOG; biosolids; pre-processed SSO that may contain soiled diapers, soiled incontinence products, soiled sanitary products and pet wastes; or any other waste that requires pasteurization (excluding the pre-processed SSO that does not contain soiled diapers, soiled incontinence products, soiled sanitary products and pet wastes), is unloaded and temporary stored in the Liquid Receiving Tank(s) designated for pasteurization under Condition 41(17)(a.) prior to pasteurization in the Pasteurization Systems;
  - (c.) ensure that all Organic Waste introduced into the Pasteurization Systems has a dry matter content of less than 18 per cent OR a slump of greater than 150 millimetres using the Test Method for the Determination of Liquid Waste (slump test) set out in Schedule 9 to Regulation 347;
  - (d.) ensure that pasteurization of the Organic Waste in the Pasteurization Systems is undertaken at a minimum temperature of 70 C for a minimum of one (1) hour; and

- (e.) monitor and record the temperature and residence time in the Pasteurization Systems on a continuous basis to verify compliance with Condition 41(17)(d.).
- (18) Monitoring results of the time and temperature of the pasteurization shall be available in a graphical format to demonstrate compliance with the pasteurization requirements in this Approval.
- (19) The Company shall operate and maintain an alarm at the Facility and a remote alarm to the dedicated Trained Personnel, which notifies Trained Personnel when the required pasteurization temperature is not being achieved.

## Anaerobic Digestion

- (20) The Company shall ensure that no more than:
  - (a) 4,332 m³ of the Organic Waste slurry shall be contained and processed within the Anaerobic Digesters located at the Facility during Phase 0;
  - (b.) 11,202 m³ of the Organic Waste slurry shall be contained and processed within the Anaerobic Digesters located at the Facility during Phase 1, with each Anaerobic Digester having a maximum above-ground volume of 2,972 m³; and
  - (c.) 18,072 m³ of the Organic Waste slurry shall be contained and processed within the Anaerobic Digesters located at the Facility during Phase 2, with each Anaerobic Digester having a maximum above-ground volume of 2,972 m³.
- (21) Each Anaerobic Digester shall be mechanically mixed, insulated and enclosed with a roof.
- (22) Treatment of the Organic Waste in the Anaerobic Digesters shall be carried out in the mesophilic temperature range of 35°C to 43°C, at all times.
- (23) The Company shall provide for a minimum hydraulic retention time of forty (40) days based on an annual average for the Organic Waste in each Anaerobic Digester during normal Anaerobic Digestion operations, and a minimum hydraulic retention time of twenty-five (25) days at all times.
- (24) The Company shall operate each Anaerobic Digester with a maximum organic loading rate of 4.0 kg of volatile solids per cubic metre per day at all times during normal Anaerobic Digestion operations, and a maximum organic loading rate of 5.0 kg of volatile solids per cubic metre per day at all times during the temporary maintenance of any Anaerobic Digester.
- (25) The hydraulic retention time, liquid level and temperature of the waste in the

- Anaerobic Digesters shall be monitored on a continuous basis and recorded to verify compliance with Conditions 41(22) and (23).
- (26) The Biogas in the headspace of each Anaerobic Digester shall be contained and exhausted into the Digestate/Biogas Storage Tank(s), the Biogas Storage Bladder, and/or the Flare, at all times.
- (27) The Biogas in the headspace of the Digestate/Biogas Storage Tank(s) and the Biogas Storage Bladder shall be exhausted into the Biogas-RNG Upgrading System, the Biogas-CHP Treatment System and/or the Flare, at all times.
- (28) The Company shall electronically monitor the pressure in the Anaerobic Digesters, Digestate Storage Tanks, the Digestate/Biogas Storage Tank(s) and the Biogas Storage Bladder, to ensure that if the over/under pressure relief valves are opened, it is recorded and the Company is notified. Should any unintentional raw (untreated) Biogas be released from the over/under pressure relief values to the atmosphere, regardless of quantity, the Company shall immediately notify the Ministry, in writing.
- (29) The total Biogas production flow rate and the concentration of methane and carbon dioxide in the Biogas shall be continuously monitored to identify process upsets in the Anaerobic Digestion process.

## Pasteurization During Phases 1 and 2

- (30) During Phases 1 and 2 when pasteurization is deemed to be required under 43(10)(b.)(ii.)(3). and 43(16)(c.), the Company shall pasteurize each said batch of Digestate within the Digestate Storage Tanks, in accordance with the following:
  - (a.) the Company shall ensure complete mixing of the Organic Waste undergoing pasteurization in the Digestate Storage Tanks;
  - (b.) the temperature of pasteurization in each Digestate Storage Tank shall be monitored with a minimum of two (2) thermocouples installed at separate but representative locations;
  - (c.) monitoring results of the time and temperature of the pasteurization shall be available and recorded in a graphical format; and
  - (d.) the said batch of Digestate shall remain within the Digestate Storage Tank where the initial batch sampling was conducted under 43(10)(b.)(ii.)(3). and 43(16)(c.) until confirmatory sampling is conducted which confirms that the said batch of Digestate has been pasteurized to levels of Faecal coliforms and Salmonella that are less than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements".

# Liquid Digestate Handling

- (31) The Anaerobic Digesters shall discharge all Digestate to the two (2) Digestate Storage Tanks for sampling and analysis in accordance with the requirements of this Approval.
- (32) Prior to the transfer of Digestate off-site, the Digestate shall be temporarily stored in the Digestate Storage Tanks and Digestate/Biogas Storage Tank(s) as set out in the Application and the Design and Operations Report, at all times.
- (33) The Digestate shall be loaded into the transfer vehicles via a camlock connection or the overhead fill station at the Digestate Loading Station.
- (34) Six (6) months prior to receiving Organic Waste at a rate that exceeds each of the receipt rate thresholds set out under Schedule C, the Company shall submit to the District Manager:
  - (a.) agreements for the storage of the Digestate off-site, which are signed by the owners of the off-site storage locations and include the owner's total Digestate storage volume that is constructed, readily-available and designated strictly for the Facility's Digestate; and
  - (b.) a storage volume calculation which confirms that the total available Digestate storage volume at the Facility and off-site (via agreements in accordance with Condition 41(34)(a.)) meets the minimum storage volume requirement in column 2 of Schedule C prior to exceeding the Organic Waste receipt rate threshold in column 1 of Schedule C.

#### Wastewater Management

- (35) The Company shall ensure that all wastewater, including:
  - (a.) spills/stormwater collected within the Liquid Unloading Station,
  - (b.) the washwater from the truck washing generated on the tipping floor within the Organics Receiving Building,
  - (c.) the run-off from all Organic Waste stored within the Organics Receiving Building, the Skimming Building, and Grit/Skimming Buildings, and
  - (d.) all condensate that is generated in the Biogas-RNG Upgrading System and the Biogas-CHP Treatment system, is contained within the leak-proof collection systems for discharge into the Liquid Receiving Tanks or Anaerobic Digesters via gravity pipes and/or forcemains, at all times.
- (36) The Company shall conduct monthly inspections of all sumps or wastewater storage/holding areas that are used to contain and collect the wastewater generated within the Organics Receiving Building, the Skimming Building, the Grit/Skimming Buildings, the Liquid Unloading Station and the Digestate

Loading Station, and empty, clean and disinfect as necessary to ensure they are functioning as intended.

#### **Prohibitions**

(37) Burning of any wastes, other than the Biogas, as approved in this Approval, is prohibited at the Facility.

## FACILITY INSPECTION AND MAINTENANCE

- 42. (1) Within thirty (30) days from the issuance of this Approval, the Company shall prepare a comprehensive written inspection program which includes procedures for inspections of all aspects of the Facility's operations including the following:
  - (a.) waste, Digestate and any other waste loading/unloading/storage/handling areas;
  - (b.) condition of all major pieces of the equipment;
  - (c.) condition of all instruments for monitoring required under this Approval;
  - (d.) security fence and property line;
  - (e.) presence of excessive fugitive dust emissions from the operation of the Facility;
  - (f.) presence of the on and off-site litter; and
  - (g.) presence of off-site odours.
  - (2) The inspection program shall be up-dated, as required, and shall be retained at the Facility and be made available for inspection by a Provincial Officer, upon request.
  - (3) The Company shall ensure that the required Facility inspections are undertaken daily by the Trained Personnel in accordance with the applicable inspection program to ensure that all Equipment, processes, working areas and supporting units at the Facility are maintained in good working order at all times and that no off-site impacts are occurring. Any deficiencies detected during these regular inspections must be promptly corrected.
  - (4) The Company shall prepare a list of critical spare parts and update this list annually or more frequently, if necessary, to ensure that this list is maintained up-to-date. The list shall be retained at the Facility and be made available for inspection by a Provincial Officer, upon request.
  - (5) The Company shall ensure that the critical spare parts are available at the Facility at all times or be immediately available to ship from an off-site supplier.

- (6) The Company shall develop and implement a preventative maintenance program for all on-site equipment associated with the processing and managing of wastes and control of fugitive odour and dust emissions in accordance with the manufacturer's requirements.
- (7) The preventative maintenance program referred to in Condition 42(6) shall be maintained up-to-date, be retained at the Facility and be available for inspection by a Provincial Officer, upon request.
- (8) The Company shall inspect the sedimentation pond at least twice per year and, if necessary, clean and maintain the sedimentation pond to prevent the excessive build-up of sediments and/or vegetation.
- (9) When the storage tanks/areas are cleaned out, the tanks/areas shall be internally inspected to ensure the integrity of its structure.

## WASTE QUALITY CRITERIA, TESTING AND MONITORING

- 43. (1) For the purpose of demonstrating compliance with the quality criteria set out in this condition, the Company shall use the most recent results of the required analysis.
  - (2) The collection and analysis of samples of the Organic Waste and Digestate shall be performed in accordance with the Sampling and Analysis Protocol and analyzed by:
    - (a.) a laboratory that is accredited by the Ministry of Agriculture, Food and Rural Affairs for that purpose; or
    - (b.) a laboratory that is accredited in accordance with the International Standard ISO/IEC 17025 General Requirement for the Competence of Testing and Calibration Laboratories, dated December 15, 1999, as amended from time to time.

## Incoming Organic Waste Quality Criteria and Testing

- (3) The Company shall ensure that the incoming Organic Waste from each source, prior to pre-processing or after pre-processing if contamination needs to be removed, complies with the maximum metal concentrations set out in column 2 or 3, as applicable, of Table 2 of Schedule 5 of O. Reg. 267/03.
- (4) For Metals:
  - (a.) The Company shall ensure that prior to its first acceptance of a given new incoming Organic Waste, the incoming Organic Waste is characterized for metals during a one (1) year period preceding its

first-time receipt at the Facility.

- (b.) If the Company relies on the published data for the well-studied/characterized incoming Organic Waste, the latest published information shall be used to confirm that the characteristics of the proposed incoming Organic Waste to be received at the Facility are in compliance with the incoming Organic Waste metal quality criteria required under this Approval.
- (c.) If the published data is not available or used to confirm compliance of the incoming Organic Waste with the metal quality criteria from this Approval, the Company shall ensure samples are collected as follows to confirm that the characteristics of the incoming Organic Waste to be received at the Facility are in compliance with the incoming Organic Waste metal quality criteria required under this Approval:
  - (i.) for the initial characterization, a minimum of one (1) composite sample from the proposed incoming Organic Waste stream, composed of no less than five (5) sub-samples for liquids and no less than ten (10) sub-samples for solids; and
  - (ii.) following the initial characterization of the incoming Organic Waste, one (1) composite sample every 1,000 m of the given Organic Waste or once a year, whichever comes first, provided the said Organic Waste is of the same type and is from the same source. If, after the first twelve (12) months of sampling and analysis, the results are consistent and continuously below the prescribed limits, one (1) composite sample shall be conducted for the given Organic Waste once a year or following any process changes, operational issues or other factors that may affect the quality of the said Organic Waste. Each composite sample shall be composed of no less than five (5) sub-samples for liquids and no less than ten (10) sub-samples for solids.
- (d.) The Company shall ensure that each sample of the incoming Organic Waste has been analysed for metals listed in column 1 of Table 2 of Schedule 5 of O. Reg. 267/03, in accordance with the methods and frequencies specified in this Approval.
- (e.) In order to resume accepting a given Organic Waste following previous rejection, the Company shall ensure that the analytical requirements listed in this Approval have been fulfilled and that two (2) independent composite samples of the said Organic Waste generate analytical results which, separately and consecutively, do not exceed the metal content limits set out in Condition 43(3).
- (f.) Should results of testing of the incoming Organic Waste for metals fail

to meet the quality criteria specified in this Approval, the said Organic Waste shall be handled in accordance with the Contingency and Emergency Response Plan.

- (g.) The Company shall ensure a copy of the analysis sets out the metal concentration in each Organic Waste in:
  - (i.) milligrams of metal per kilogram of total solids, dry weight, in case of the analysis of metals in materials that have a concentration of total solids of 10,000 milligrams or more per litre; and
  - (ii.) milligrams of metal per litre, in the case of the analysis of regulated metals in materials that have a concentration of total solids of less than 10,000 milligrams per litre.
- (5) The incoming Organic Waste shall not be accepted at the Facility if the analytical requirements listed in this Approval have not been fulfilled or if the analysis of the said Organic Waste as described in this Approval determines that the metal content in the said Organic Waste exceeds the metal content limits set out in Condition 43(3).

# Digestate Quality Criteria and Testing

- (6) If the Digestate is managed as a material destined for land application on agricultural land or managed as a Fertilizer, the Digestate shall comply with the following requirements unless O. Reg. 267/03 requires otherwise for a NASM:
  - (a.) regulated metal shall not exceed the maximum concentrations set out in Table 2 of Schedule 5 of O. Reg. 267/03, further subject to any other applicable regulatory requirements;
  - (b.) pathogens shall not exceed the maximum pathogen levels set out in Table 2 of Schedule 6 of O. Reg. 267/03 for CP1 NASM, Table 3 of Schedule 6 of O. Reg. 267/03 for CP2 NASM or Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements" for Fertilizer, as applicable;
  - (c.) Foreign Matter shall not exceed 2% calculated on a dry weight basis;
  - (d.) plastics shall not exceed 0.5% calculated on a dry weight basis; and
  - (e.) there shall not be any particles of any material that will not pass through a screen whose largest opening has an area of 2.5 square centimetres.
- (7) If the Digestate is managed as a waste destined for land application on non-agricultural land;
  - (a.) the Digestate shall meet the quality criteria required by the conditions of the Environmental Compliance Approval for the site where it is to be land-applied; or

- (b.) in the absence of specific quality criteria requirements in the Environmental Compliance Approval for the site where the Digestate is to be land-applied, it shall meet the requirements set out in Condition 43(6) of this Approval for Fertilizer.
- (8) If the Digestate is managed as a NASM destined for land application on agricultural land or managed as a Fertilizer, the Company shall:
  - (a.) collect one (1) sample per month from each Digestate Storage Tank during complete mixing and analyze the samples for Foreign Matter, Plastics, and metals listed in Table 2 of Schedule 5 of O. Reg. 267/03; and
  - (b.) collect one (1) sample every two weeks from each Digestate Storage Tank during complete mixing, and analyze each of the samples for:
    - (i.) Faecal coliforms;
    - (ii.) Salmonella; and
    - (iii.) if the Digestate is managed as a NASM, the pathogens listed in Tables 1, 2 or 3 of Schedule 6 of O. Reg. 267/03, as applicable.
- (9) If the results required by Condition 43(8)(b.) for twelve (12) consecutive sampling events are all less than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements", the Digestate sampling frequency set out under Condition 43(8)(b.) can be reduced to once per month.
- (10) Despite Conditions 43(8)(b.) and 43(9), if any of the results required by Conditions 43(8)(b.) and 43(9) exceed the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements", the Company shall immediately notify the receiving sites whom received the Digestate that exceeded on pathogens and:
  - (a.) during Phase 0:
    - (i.) manage the Digestate as a material destined for land application on agricultural land if the NASM quality criteria set out in Condition 43(6) is met; or
    - (ii.) pasteurize all Organic Waste slurry within the Pasteurization Systems prior to Anaerobic Digestion in accordance with Condition 41(17), and:
      - (1.) apply for an amendment to this Approval prior to the commencement of Phase 1 to address pathogens; OR
      - (2.) revert to the sampling that was being conducted prior to the pathogen exceedance under Conditions 43(8)(b.) and/or 43(9) if written concurrence is provided from the Director to do so.
  - (b.) during Phases 1 or 2:
    - (i.) manage the Digestate as a material destined for land application

- on agricultural land if the NASM quality criteria set out in Condition 43(6) is met; OR
- (ii.) manage the Digestate as follows:
  - (1.) collect one (1) sample from each full batch of Digestate that is produced within each of the Digestate Storage Tanks, and analyze the sample for Faecal coliforms and Salmonella;
  - (2.) store each batch of Digestate that is generated and sampled under Condition 43(10)(b.)(ii.)(1.) at the Facility until the sampling required by this condition confirms that the levels of Faecal coliforms and Salmonella are less than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements";
  - (3.) if the sampling for a batch of Digestate that is generated and sampled under Condition 43(10)(b.)(ii.)(1.) (including the option to collect one (1) confirmatory sample that is to be geometrically averaged with the original sample) confirms that the levels of Faecal coliforms and Salmonella are greater than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements", the Company shall pasteurize the Digestate in accordance with the requirements set out under condition 41(30);
  - (4.) each time that the batch sampling required under Condition 43(10) is triggered, the Company shall conduct the Digestate batch sampling required by this condition for a minimum period of three (3) months and as follows:
    - (a) if all of the sampling results in the initial three (3) months of testing confirm that pasteurization is not required under Condition 43(10)(b.)(ii.)(3.), the Company shall revert to the sampling that was being conducted prior to the pathogen exceedance under Conditions 43(8)(b.) and/or 43(9); and
    - (b) if any of the sampling results in the initial three (3) months of testing confirm that pasteurization is required under Condition 43(10)(b.)(ii.)(3.), the Company shall continue to conduct the batch sampling required under this condition until the Approval is amended otherwise to address pathogens OR written concurrence is provided

from the Director to revert to the sampling that was being conducted prior to the pathogen exceedance under Conditions 43(8)(b.) and/or 43(9).

- (11) If the Digestate is managed as a waste destined for land application on non-agricultural land, the Company shall,
  - (a.) undertake quality control sampling and testing as required by the conditions of the Environmental Compliance Approval for the site where the Digestate is to be land-applied; and
  - (b.) in the absence of specific sampling and testing requirements in the Environmental Compliance Approval for the site where the Digestate is to be land-applied, the Company shall undertake quality control sampling and testing required by Conditions 43(8), (9) and (10) for Fertilizer.

## Renewable Natural Gas Quality Criteria and Testing

- (12) Renewable Natural Gas shall comply with the applicable criteria required by:
  - (a.) the owner/operator of the natural gas distribution infrastructure for its intended injection into the said natural gas distribution infrastructure; or
  - (b.) the third party consumer of the Renewable Natural Gas, with approval from the District Manager, for any intended uses that do not include injection into the natural gas distribution infrastructure. In the absence of third party consumer criteria, the Renewable Natural Gas shall meet the criteria under Condition (12)(a.) without approval from the District Manager.
- (13) The Renewable Natural Gas quality shall be monitored in accordance with the:
  - (a.) the owner/operator of the natural gas distribution infrastructure for its intended injection into the said natural gas distribution infrastructure; and
  - (b.) the third party consumer of the Renewable Natural Gas for any intended uses that do not include injection into the natural gas distribution infrastructure. In the absence of third party consumer criteria, the Renewable Natural Gas shall be monitored in accordance with Condition (13)(a.).
- (14) The Biogas and the Renewable Natural Gas production rates shall be recorded on a monthly basis.

## Pathogen Batch Testing Studies

- (15) Despite Condition 41(17), if the Company intends to manage the Digestate as a Fertilizer or a CP1 NASM <u>without</u> pasteurization of pre-processed SSO with Human Body Waste during Phase 0, the Company may do so for a maximum period of 6 consecutive months via a Phase 0 Pathogen Batch Testing Study as follows:
  - (a.) the Company shall collect a sample from each half batch and full batch of Digestate that is produced within each of the Digestate Storage Tanks (i.e., two samples per batch) during complete mixing, and analyze the samples for Faecal coliforms and Salmonella;
  - (b.) each batch of Digestate that is generated and sampled under Condition 43(15)(a.) cannot be shipped off-site until the sampling required by this condition confirms that the levels of Faecal coliforms and Salmonella are less than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements";
  - (c.) if any of the batch sampling results confirm that the levels of Faecal coliforms and Salmonella are greater than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements", the Company shall manage the Digestate as a CP2 NASM until:
    - (i) pasteurization of SSO with Human Body Waste is resumed in accordance with Condition 41(17); and
    - (ii) following the resumption of pasteurization, four consecutive Digestate batch testing events sampled in accordance with Conditions 43(15)(a.) and 43(15)(b.) confirm that the levels of Faecal coliforms and Salmonella are less than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements";
  - (d.) during the months where batch testing is required by this condition, the Digestate sampling required under Conditions 43(8)(b.) and 43(9) to (11), as applicable, shall be temporarily halted; and
  - (e.) during the months where batch testing is required by this condition, the Company shall collect one (1) sample every two weeks from each Liquid Receiving Tank and analyze each Liquid Receiving Tank sample for Faecal coliforms and Salmonella.

- (16) Despite Condition 41(17), if all of the Digestate sampling results during the Phase 0 Pathogen Batch Testing Study confirm that the levels of Faecal coliforms and Salmonella are less than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements", the Company may manage the Digestate as a Fertilizer or a CP1 NASM during the remainder of Phase 0 without pasteurization of pre-processed SSO with Human Body Waste up to the maximum mass loading rate that was tested in the Phase 0 Pathogen Batch Testing Study. In the event that the Company starts to receive pre-processed SSO with Human Body Waste that exceeds the mass loading rate tested in the most recent Phase 0 Pathogen Batch Testing Study, the Company can either begin a new Phase 0 Pathogen Batch Study for a period of 6-months or pasteurize the feedstock in accordance with Condition 41(17).
- (17) If the Company intends to manage the Digestate as a Fertilizer or a CP1 NASM during Phase 1, the Company shall conduct a Phase 1 Pathogen Batch Testing Study in accordance with the Pasteurization and Testing Plan as follows during Phase 1:
  - (a.) Upon reaching an Organic Waste monthly receipt rate of 2,750 tonnes/month, 5,000 tonnes/month, 7,500 tonnes/month and 9,000 tonnes/month, the Company shall collect a sample from each half batch and full batch of Digestate that is produced within each of the Digestate Storage Tanks (i.e., two samples per batch) during complete mixing, and analyze the samples for Faecal coliforms and Salmonella;
  - (b.) each batch of Digestate that is generated and sampled under Condition 43(17)(a.) cannot be shipped off-site until the sampling required by this condition confirms that the levels of Faecal coliforms and Salmonella are less than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements";
  - (c.) if the sampling for a batch of Digestate confirms that the levels of Faecal coliforms and Salmonella are greater than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements", the Company shall pasteurize the Digestate in accordance with the requirements set out under condition 41(30).
  - (d.) each time that the batch sampling required under Condition 43(17)(a.) is triggered, the Company shall continue to conduct the Digestate batch sampling until the 6-month rolling average monthly receipt rate exceeds its respective threshold AND all of the sampling results within that 6-month period confirm that the levels of Faecal coliforms and

- Salmonella in the Digestate are less than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements";
- (e.) despite Condition 43(17)(d.), if any of the batch sampling results confirm that the levels of Faecal coliforms and Salmonella in the Digestate are greater than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements", then the Company shall re-conduct the 6-month Digestate batch sampling period required by Conditions 43(17)(a.), (b.), (c.) and (d.);
- (f.) during the months where batch testing is required by this condition, the Digestate sampling required under Conditions 43(8)(b.) and 43(9) to (11), as applicable, shall be temporarily halted; and
- (g.) during the months where batch testing is required by this condition, the Company shall collect one (1) sample every two weeks from each Liquid Receiving Tank and analyze each Liquid Receiving Tank sample for Faecal coliforms and Salmonella.
- (18) (a.) The Company shall not receive the waste quantity set out in Condition 38(4) for Phase 2 until the Phase 1 Pathogen Batch Testing Study under Condition 43(17) has been completed at an Organic Waste monthly receipt rate of 9,000 tonnes/month.
  - (b) Within thirty (30) days of completing the Phase 1 Pathogen Batch Testing Study at an Organic Waste monthly receipt rate of 9,000 tonnes/month, the Company shall submit a report to the District Manager, summarizing the sampling results, loading rate of feedstocks requiring pasteurization and the pasteurization operating details (time, temperature, etc.), including the proposed pasteurization operating details if pasteurization is deemed necessary as a result of this study.
- (19) If any of the batch sampling results during the Phase 1 Pathogen Batch Testing Study confirm that the levels of Faecal coliforms and Salmonella in the Digestate are greater than the maximum acceptable levels of organisms listed in Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements", the Company shall not receive the waste quantity set out in Condition 38(4) for Phase 2 until:
  - (a.) the Director has been notified of the exceedance(s) in writing with explanations for the exceedances and any proposed corrective actions (including any necessary Amendments to the Approval), along with a copy of all sampling results; and

(b.) the Director has provided written concurrence to the Company to receive the waste quantity set out in Condition 38(4) for Phase 2.

#### Source Testing Requirements

- (20) The Company shall perform Source Testing in accordance with the procedures in Schedule F to determine the rates of emissions of odour and total reduced sulphur from the sources listed below, six (6) months from the date of commissioning of Phase 1 and repeated annually thereafter (preferably during the summer months), or at a date, frequency and source location(s) as directed or agreed to in writing by the District Manager:
  - (a.) at the exhaust of the Biofilter;
  - (b.) at the building ventilation exhausts serving the Skimming Building and the two (2) Grit/Skimming Buildings; and
  - (c.) at the Liquid Waste Receiving Tank, to quantify fugitive emissions when liquid Organic Waste is being received through the open tank via a dump trailer.

## END USE OF OUTPUTS

## End Use of Digestate

- 44. (1) All Digestate shipped from the Facility as a Fertilizer must be accompanied by a Product Label that has been approved by the CFIA.
  - (2) Subject to the CFIA's Fertilizer registration requirements and prior to each initial shipment for each Fertilizer label, the Company shall maintain an on-site written or digital record. The record shall include, as a minimum, the following:
    - (a.) notifications from the CFIA that the Digestate generated at the Facility has been assessed and approved for use as a Fertilizer under the *Fertilizers Act*;
    - (b.) a copy of the complete application package submitted to the CFIA in support of the request to manufacture the Fertilizer;
    - (c.) the specific requirements of the CFIA that must be met for the Digestate to be considered as a Fertilizer including all process monitoring, analytical, and quality assurance/quality control requirements;

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

# End Use of Biogas/Renewable Natural Gas

- 45. (1) Treated Biogas is considered to be Renewable Natural Gas when it meets the requirements for:
  - (a.) injection into the natural gas distribution infrastructure; or
  - (b.) any other third party end-use, with approval from the District

#### Manager.

(2) Treated Biogas which does not meet the required Renewable Natural Gas quality criteria or the quality criteria provided by the manufacturer of the CHP for use in the CHP shall be re-processed or transferred to the Flare for flaring.

## NUISANCE IMPACT CONTROL AND HOUSEKEEPING

#### Trucks and Traffic

- 46. (1) The Company shall visually inspect the vehicles that have delivered the waste to the Facility for evidence of leaking or dripping waste. The Company of the vehicles that leak shall be given a written notice of the presence of the leak. The notice shall include the vehicle owner's name, the vehicle Environmental Compliance Approval number, the type of waste delivered to the Facility and the date of the delivery. A copy of the notice shall be retained at the Facility and it shall be provided to the Ministry staff upon request.
  - (2) The Company shall ensure that the exterior of vehicles delivering the waste to the Facility is washed prior to their departure from the Facility on an as-needed basis.
  - (3) The Company shall ensure that there is no queuing or parking of vehicles that are waiting to enter the Facility on any roadway that is not a distinct part of the Facility.
  - (4) The Company shall ensure that all new drivers of vehicles transporting waste to and from the Facility are instructed/trained on the acceptable on-site traffic routes.
  - (5) All waste must be transported to and from the Facility in accordance with the Act and Reg. 347 and in vehicles that have been approved by the Ministry or registered on the Environmental Activity and Sector Registry (EASR), as required.
  - (6) The Company shall ensure that all vehicles hauling solid waste are adequately covered prior to departing from the Facility to prevent fugitive odour or dust emissions during transport.
  - (7) The Company shall ensure that all on-site roads and operations/yard areas are regularly swept/wetted to prevent dust impacts off-site.

#### Litter

(8) The Company shall prevent the escape of litter from the Facility and pick up

litter around the Facility on a daily basis, or more frequently if necessary.

## Vectors, Vermin and Wildlife

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

## Housekeeping

- (10) The Company shall ensure that the floor of the Organics Receiving Building and any Organic Waste temporary storage areas are cleaned regularly, including being washed down, as required.
- (11) The Company shall regularly clean all equipment used to handle and process the Organic Waste at the Facility, as required.

## **OPERATIONS MANUAL AND STAFF TRAINING**

## **Operations Manual**

- 47. (1) Within thirty (30) days from the issuance of this Approval, the Company shall update and implement an Operations Manual for use by the Facility personnel. As a minimum, the Operations Manual shall contain the following:
  - (a.) outline the responsibilities of Facility personnel;
  - (b.) personnel training protocols;
  - (c.) waste receiving and screening procedures;
  - (d.) waste unloading, handling, storage and processing procedures;
  - (e.) process monitoring procedures;
  - (f.) sampling and testing procedures;
  - (g.) the frequency of the inspection and replacement of the activated carbon in the Activated Carbon Adsorption Units and procedures for monitoring their performance;
  - (h.) the frequency of inspecting the wet water scrubbers and Biofilter media, and procedure for monitoring their performance;
  - (i.) all appropriate measures to minimize odour, dust and noise emissions from all potential sources at the Facility;
  - (j.) Facility inspections, spill, fire, upset and leakage recording procedures;
  - (k.) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment

- manufacturers;
- (l.) procedure for handling complaints as described in this Approval;
- (m.) procedure for monitoring the negative pressure ventilation in the Organics Receiving Building.
- (2) A copy of the Operations Manual shall be kept at the Facility, must be accessible to personnel at all times and must be updated, as required.

## Staff Training

- 48. (1) All operators of the Facility shall be trained with respect to the following:
  - (a.) relevant air, noise, wastewater and waste management legislation, regulations and guidelines;
  - (b.) major environmental concerns pertaining to the waste to be handled at the Facility;
  - (c.) occupational health and safety concerns pertaining to the processes and wastes to be handled at the Facility;
  - (d.) operation and management of the Facility, or area(s) within the Facility, as per the specific job requirements of each individual operator, and which may include equipment and operating procedures for receiving, screening and identifying waste, refusal, handling, processing and temporarily storing wastes;
  - (e.) an outline of the responsibilities of Facility personnel including roles and responsibilities during emergency situations;
  - (f.) records keeping procedures;
  - (g.) the Emergency Response and Contingency Plan including exit locations and evacuation routing, and location of relevant equipment available for emergency situations;
  - (h.) Facility inspection and maintenance procedures, as required by this Approval;
  - (i.) nuisance impact control and housekeeping procedures, as required by this Approval;
  - (j.) specific written procedures for the control of adverse effects from the Facility;
  - (k.) specific written procedures for refusal of unacceptable incoming Organic Waste loads; and
  - (1.) the requirements of this Approval.
  - (2) The training of the operators of the Facility shall also include the procedures contained in the Operations Manual.
  - (3) The training of the operators of the Facility shall be undertaken:
    - (a.) upon commencing employment at the Facility;
    - (b.) whenever procedures are updated or during the planned three (3)-year

## **EMERGENCY RESPONSE AND CONTINGENCY PLAN**

- 49. (1) Within ninety (90) days from the issuance of this Approval, the Company shall update the Emergency Response and Contingency Plan. The Emergency Response and Contingency Plan shall be updated in consultation with the District Manager, the local Municipality and the Fire Department. The Emergency Response and Contingency Plan, as a minimum, shall include the following information:
  - (a.) emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire, explosion or any other emergency situation, including specific clean-up methods for wastes expected to be generated from the emergency situation;
  - (b) odour abatement plan to propose the design and operation of the contingency measures necessary to alleviate impacts from odours emitted from the waste management activities at the Facility;
  - (c.) dust abatement plan to propose the design and operation of the contingency measure to alleviate impacts from dust originating from the waste management and vehicular activities at the Facility;
  - (d.) trigger mechanism for implementation of the abatement plans required by (b.) and (c.), above;
  - (e.) a list of equipment and clean up materials available for dealing with the emergency situations;
  - (f.) notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Facility, the Ministry's District Office and Spills Action Centre, the local Fire Department, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response;
  - (g.) procedures and actions to be taken should the incoming Organic Waste not meet the quality criteria specified by this Approval and requires removal from the Facility as set out in this Approval;
  - (h.) procedures and actions to be taken should the outgoing Residual Waste not meet the quality criteria set out in the receiving site's Environmental Compliance Approval;
  - (i.) procedures and actions to be taken should the Digestate fail to meet the requirements under the NMA;
  - (j.) procedures and actions to be taken should the Digestate fail to meet the requirements of a Fertilizer; and
  - (k.) procedures and actions to be taken should the occurrence of the substantiated complaints require the Company to suspend the Organic Waste processing activities at the Facility.

- (2) An up-to-date version of the Emergency Response and Contingency Plan shall be kept at the Facility at all times, in a central location available to all staff, and a copy shall be submitted to the District Manager, the local Municipality and the Fire Department, if requested.
- (3) The Emergency Response and Contingency Plan shall be reviewed on an annual basis and updated, if necessary. The revised version of the Emergency Response and Contingency Plan shall be submitted to the District Manager, the local Municipality and the Fire Department for comments and concurrence.
- (4) Prior to installing an on-site Renewable Natural Gas injection point into the natural gas distribution infrastructure, the Emergency Response and Contingency Plan shall be updated and submitted to the District Manager, the local Municipality and the Fire Department for comments and concurrence.

#### EMERGENCY SITUATIONS RESPONSE AND REPORTING

- 50. (1) The Company shall immediately take all necessary measures, as outlined in the Emergency Response and Contingency Plan, to handle the emergency situations occurring at the Facility.
  - (2) The Company shall ensure that the equipment and materials outlined in the Emergency Response and Contingency Plan are immediately available at the Facility at all times and are in a good state of repair and fully operational.
  - (3) The Company shall ensure that all Facility personnel are fully trained in the use of the equipment and materials outlined in the Emergency Response and Contingency Plan, and in the procedures to be employed in the event of an emergency.
  - (4) All Spills shall be immediately reported to the Ministry's Spills Action Centre at 1-800-268-6060 and shall be recorded in the log book as to the nature and cause of the Spill, and the action taken for clean-up, correction and prevention of similar future occurrences.
  - (5) Should a Spill occur at the Facility, in addition to fulfilling the requirements from the Act, the Company shall submit to the District Manager a written report within three (3) calendar days outlining the nature of the Spill, remedial measure taken and the measures taken to prevent future occurrences at the Facility.

#### RECORDS KEEPING AND RETENTION

Daily Records

- 51. (1) The Company shall maintain an on-site written or digital record of activities undertaken at the Facility. All measurements shall be recorded in consistent metric units of measurement. The Company shall record, as a minimum, the following:
  - (a.) details on the daily quantity and type of the Organic Waste received at the Facility, including the incoming Organic Waste characterization results, or published characterization data, as applicable, and details on the Organic Wastes that may require pasteurization (for example, SSO with Human Body Waste, FOG, DAF, etc.);
  - (b.) the daily quantity and type of waste processed at the Facility, including the waste inputted into the Anaerobic Digesters;
  - (c.) the daily quantity and type of waste present at the Facility, including the Organic Waste in-storage and in-process;
  - (d.) the daily amount of the Digestate shipped from the Facility, its categorization and destination;
  - (e.) the daily quantity of the Residual Waste shipped for final disposal, the name of the receiving site and its Environmental Compliance Approval number;
  - (f.) the daily quantity and type of any Rejected Waste rejected from the Facility;
  - (g.) the daily housekeeping activities, including litter collection, washing/cleaning activities, etc.
  - (h.) the daily quantity of Biogas generated at the Facility;
  - (i.) the daily quantity of Renewable Natural Gas transferred from the Facility and it's destination; and
  - (j.) the daily duration of the flare being used for Biogas flaring.
  - (2) The Company shall retain all records retaining to waste characterization required by this Approval for a minimum of five (5) years.

#### **Emergency Situations**

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

#### **Inspections**

(4) The Company shall maintain an on-site written or digital record of inspections

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

- (a.) the name and signature of person that conducted the inspection;
- (b.) the date and time of the inspection;
- (c.) the list of any deficiencies discovered;
- (d.) the recommendations for remedial action; and
- (e.) the date, time and description of actions taken.

## **Training**

- (5) The Company shall maintain an on-site written or digital record of training as required by this Approval. The record shall include, as a minimum, the following:
  - (a.) date of training;
  - (b.) name and signature of person who has been trained; and
  - (c.) description of the training provided.

## Sampling and Testing

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

#### Monitoring Records

(7) The Company shall establish and maintain a written or digital record of all monitoring activities at the Facility as required by this Approval.

# Complaints Response Records

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

#### Air/Noise Records

(9) Unless otherwise specified in this Approval, the Company shall retain, all reports, 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, but not limited to, the following records:

- (a.) all records on the maintenance, repair and inspection of Equipment;
- (b.) all records on the monitored activities required by this Approval;
- (c.) all reports on the negative pressure assessment of the Organics Receiving Building;
- (d.) all reports on the Source Testing required by this Approval;
- (e.) all measures taken to minimize odourous emissions from all potential sources at the Facility; and
- (f.) all records related to environmental complaints as required by this Approval;

## **Annual Reports**

- (10) By July 31<sup>st</sup> following the end of each operating year, the Company shall prepare and maintain an Annual Report at the Facility summarizing the operation of the Facility covering the previous calendar year. This Annual Report shall be made available to the District Manager upon request. This Annual Report shall include, as a minimum, the following information:
  - (a.) a monthly summary of the quality and the quantity of all incoming Organic Waste and outgoing Digestate, Residual Waste and Rejected Waste, including analytical data required to characterize the waste;
  - (b.) material balance for each month documenting the amount of Organic Waste stored at the Facility;
  - (c.) a monthly summary of the quality and the quantity of the Digestate pumped to the Digestate Storage Tanks and Digestate/Biogas Storage Tank(s);
  - (d.) a monthly summary of the quality and the quantity of the Digestate shipped from the Facility and its end-use designation (ie. Fertilizer, NASM type, or a non-exempted waste) and its final end-use destination (ie. agricultural or non-agricultural location) and address;
  - (e.) annual amount of Biogas produced at the Facility;
  - (f.) annual amount of Renewable Natural Gas transferred from the Facility and its final end-use destination;
  - (g) annual duration of the flare being used for Biogas flaring;
  - (h.) any environmental and operational problems, that could negatively impact the environment, encountered during the operation of the Facility or during Facility inspections and any mitigative actions taken;
  - (i.) any recommendations to minimize environmental impacts from the operation of the Facility and to improve Facility operation and monitoring programs in this regard;
  - (j.) a summary of any environmental complaints received and the responses made;
  - (k.) a summary of any emergency situations, including use of over/under pressure relief valves, that have occurred at the Facility and how they

- were handled;
- (l.) an update on the amount of Financial Assurance which has been provided to the Director;
- (m.) a summary of all inspections and maintenance carried out at the Facility;
- (n.) a written statement that the Facility was in compliance with the Approval; and
- (o.) any other information the District Manager requires from time to time.

#### SEWAGE WORKS

## Spill Containment Facility

- 52. The Company shall design and construct a transformer substation oil spill containment facility which meets the following requirements:
  - (1) the spill containment facility serving the transformer substation shall have a minimum volume equal to the volume of transformer oil and lubricants plus the volume equivalent to providing a minimum 24-hour duration, 50-year return storm capacity for the stormwater drainage area around the transformer under normal operating conditions. This containment area shall have:
    - (a) an impervious floor with walls usually of reinforced concrete or impervious plastic liners, sloped toward an outlet / oil control device, allowing for a freeboard of 0.25 metres terminating approximately 0.30 metres above grade to prevent external stormwater flows from entering the facility. The facility shall have a minimum of 300mm layer of crushed stoned (19mm to 38mm in diameter) within, all as needed in accordance to site specific conditions and final design parameters; or
    - (b) a permeable floor with impervious plastic walls and around the transformer pad; equipped with subsurface drainage with a minimum 50mm diameter drain installed on a sand layer sloped toward an outlet for sample collection purposes; designed with an oil absorbent material on floor and walls, and allowing for a freeboard of 0.25 metres terminating approximately 0.30 metres above grade to prevent external stormwater flows from entering the facility. The facility's berm shall be designed as needed in accordance to site specific conditions and the facility shall have a minimum 300mm layer of crushed stoned (19mm to 38mm in diameter) on top of the system, as needed in accordance to site specific conditions and final design parameters;

- the spill containment facility shall be equipped with an oil detection system; it also shall have a minimum of two (2) PVC pipes (or equivalent material) 50mm diameter to allow for visual inspection of water accumulation. One pipe has to be installed half way from the transformer pad to the vehicle access route;
- (3) the spill containment facility shall have appropriate sewage appurtenances as necessary, such as but not limited to: sump, oil/grit separator, pumpout manhole, level controllers, floating oil sensors, etc., that allows for batch discharges or direct discharges and for proper implementation of the monitoring program described under Condition 54; and
- (4) the Company shall have a qualified person on-site during construction to ensure that the system is installed in accordance with the approved design and specifications.

# 53. The Company shall:

- (1) within six (6) months after the completion of the construction of the transformer substation spill containment facility, provide to the District Manager an engineering report and as-built design drawings of the sewage works for the spill containment facility and any stormwater management works required for it, signed and stamped by an independent Professional Engineer licensed in Ontario and competent in electrical and environmental engineering. The engineering report shall include the following;
  - (a) as-built drawings of the sewage works for the spill containment facility and any stormwater management works required for it;
  - (b) a written report signed by a qualified person confirming the following:
    - i. on-site supervision during construction;
    - ii. in case of a permeable floor systems: type of oil absorbent material used (for mineral-based transformer oil or vegetable-based transformer oil, make and material's specifications);
    - iii. use of stormwater best management practices applied to prevent external surface water runoff from entering the spill containment facility; and
    - iv. confirm adequacy of the installation in accordance with specifications.
  - (c) confirmation of the adequacy of the operating procedures and the emergency procedures manuals as it pertains to the installed sewage works;

- (d) procedures to provide emergency response to the site in the form of pumping and clean-up equipment within 24 hours after an emergency has been identified. Such response shall be provided even under adverse weather conditions to prevent further danger of material loss to the environment;
- (2) as a minimum, the Company shall check the oil detection systems on a monthly basis and create a written record of the inspections;
- (3) ensure that the effluent is essentially free of floating and settle-able solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters;
- (4) immediately identify and clean-up all losses of oil from the transformer;
- (5) upon identification of oil in the spill containment facility, take immediate action to prevent the further occurrence of such loss;
- (6) ensure that equipment and material for the containment, clean-up and disposal of oil and materials contaminated with oil are kept within easy access and in good repair for immediate use in the event of:
  - (a) loss of oil from the transformer,
  - (b) a spill within the meaning of Part X of the Act, or
  - (c) the identification of an abnormal amount of oil in the effluent.
- (7) in the event of finding water accumulation in the PVC pipes (visual inspection) after 48 hours of any storm event, the Company shall: (a) for impervious floors, inspect the sewage appurtenances that allow drainage of the concrete pit; or (b) for permeable systems, replace the oil absorbent material to ensure integrity of the system performance and design objectives;
- (8) for permeable floor systems, the Company shall only use the type of oil specified in the design, i.e. mineral-based transformer oil or vegetable-based transformer oil. If a change is planned to modify the type of oil, the Company shall also change the type of the oil absorbent material and obtain approval from the Director to amend this Approval before any modification is implemented.
- 54. The Company shall design, construct and operate the sewage works such that the concentration of the effluent parameter named in the table below does not exceed the maximum Concentration Objective shown for that parameter in the effluent, and shall comply with the following requirements:

<b>Effluent Parameters</b>	Maximum Concentration Objective
Oil and Grease	15mg/L

- (1) notify the District Manager as soon as reasonably possible of any exceedance of the maximum concentration objective set out in the table above;
- (2) take immediate action to identify the cause of the exceedance; and
- (3) take immediate action to prevent further exceedances.
- 55. Upon commencement of the operation of the Facility, the Company shall establish and carry out the following monitoring program for the sewage works:
  - (1) the Company shall collect and analyze the required set of samples at the sampling points listed in the table below in accordance with the measurement frequency and sample type specified for the effluent parameter, oil and grease, and create a written record of the monitoring:

Effluent Parameters	Measurement Frequency and Sample Points	Sample Type
Oil and Grease	Quarterly, i.e. four times over a year, relatively evenly spaced having a minimum two (2) of these samples taken within 48 hours after a 10mm rainfall event.	Grab

- in the event of an exceedance of the maximum concentration objective set out in the table in Condition 54, the Company shall:
  - (a) increase the frequency of sampling to once per month, for each month that effluent discharge occurs; and
  - (b) provide the District Manager, on a monthly basis, with copies of the written record created for the monitoring until the District Manager provides written direction that monthly sampling and reporting is no longer required; and
- (3) if over a period of twenty-four (24) months of effluent monitoring under Condition 55(1), there are no exceedances of the maximum concentration set out in the table for Concentration Objective, the Company may reduce the measurement frequency of effluent monitoring to a frequency as the District Manager may specify in writing, provided that the new specified frequency is never less than annual.
- 56. The Company shall comply with the following methods and protocols for any sampling, analysis and recording undertaken in accordance with Condition 55:
  - (1) the Ministry publication "Protocol for the Sampling and Analysis of Industrial/ Municipal Wastewater", January 1999, as amended from time to time by more recently published editions; and

(2) the publication "Standard Methods for the Examination of Water and Wastewater", 21st edition, 2005, as amended from time to time by more recently published editions.

#### Stormwater Management

- 57. (1) The Company shall implement the sediment and erosion control plan prior to the start of any construction and maintained with regular maintenance by the contractor until the development is complete with final surface and vegetation stabilized with mature growth, as outlined in Section 3.7 of the report included in the Application and entitled "Grimsby Anaerobic Digestion Site Expansion Stormwater Management Report, dated October 31st, 2023 and prepared by GRIT Engineering Inc."
  - (2) The Company shall implement the Design Recommendations outlined in Section 3.0 and drawings C300 and C500 of the report included in the Application and entitled "Grimsby Anaerobic Digestion Site Expansion Stormwater Management Report, dated October 31st, 2023 and prepared by GRIT Engineering Inc." and within one (1) year of the completion of the stormwater management works the Company shall prepare a set of as-built drawings showing the stormwater management works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Facility for the operational life of the stormwater management works.

#### **GROUNDWATER AND GAS MONITORING:**

## **Groundwater Monitoring**

- 58. (1) The Company shall monitor groundwater and the leak detection monitoring points in accordance with the monitoring program outlined in Schedule D.
  - (2) Except for the daily visual checks identified in Schedule D, a Professional Geoscientist or Professional Engineer possessing appropriate hydrogeologic training and experience shall execute or directly supervise the execution of the environmental monitoring and reporting program.
  - (3) If a daily visual check of the Liquid Receiving Tank well or the Tank Farm central sump show any signs of leachate contamination (e.g., colour, turbidity, oil sheens, etc.), a sample shall forthwith be collected and analyzed for the groundwater parameters identified in Schedule D.
  - (4) If any sampling confirms leachate impacts, the Company shall immediately notify the District Manager, and an investigation into the cause and the need for implementation of remedial or contingency actions shall be carried out by

the Company.

#### **Groundwater Wells and Monitors**

- (5) The Company shall ensure that all groundwater monitoring wells which form part of the monitoring program are properly capped, locked and protected from damage.
- (6) Any groundwater monitoring well included in the monitoring program shall be assessed, repaired, maintained, extended or properly abandoned in accordance with the Wells Regulation (Regulation 903) made under the OWRA.
- (7) The Company shall repair or replace any monitoring well included in the monitoring program which is destroyed or in any way made to be inoperable for sampling such that no more than one regular sampling event is missed.
- (8) All monitoring wells which are no longer required as part of the monitoring program, and which have been approved in writing by the District Manager for abandonment, shall be properly abandoned in accordance with the Wells Regulation (Regulation 903) made under the OWRA. A report on the abandonment of the monitoring well shall be included in the Annual Report for that year.

## Changes to the Monitoring Plans

- (9) Changes to the monitoring plans for the Facility shall be submitted to the District Manager for review by the Ministry's Regional Technical Support Section prior to submission to the Director for approval.
- (10) Changes to the monitoring plans for which the Company has received written concurrence from the District Manager shall be submitted to the Director for approval prior to implementation.

#### Monitoring Report

- (11) Within ninety (90) days of completing the fourth year of groundwater monitoring as required by this Approval, the Company shall retain a Professional Geoscientist or Professional Engineer possessing appropriate hydrogeologic training and experience to prepare and submit to the District Manager a Monitoring Report summarizing the groundwater and leak-detection monitoring results. The Monitoring Report shall include the following:
  - (a.) a section of text describing the Facility's hydrogeologic setting;
  - (b.) a water table contour map and an assessment of seasonal variation on groundwater flow direction within the overburden and bedrock flow

- systems;
- (c.) stratigraphic cross-sections which clearly illustrate the subsurface distribution of geological materials;
- (d.) details on the monitoring program undertaken, including a plan outlining monitor locations and a table outlining monitoring locations, analytical parameters sampled, frequency of sampling and sampling results, with the analytical results for the critical contaminants presented graphically on time-series graphs;
- (e.) the results and an interpretive analysis of the results of all groundwater and leak-detection monitoring, including an assessment of the need to amend the monitoring programs;
- (f.) conclusions of the monitoring data, a review of the adequacy of monitoring programs, recommendations for any changes to monitoring programs that may be necessary;
- (g.) a description of the quality assurance/quality control sampling protocols and any problems encountered during the sampling events which may have impacted the reliability of analytical results;
- (h.) a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903; and
- (i.) a groundwater quality trigger mechanism and contingency plan for Director approval. This plan shall establish site-specific trigger levels for contaminants of concern based on the four years of background groundwater monitoring at the site and propose contingency measures which would be implemented in the event of a confirmed exceedance of a site-specific trigger level.

## Gas Monitoring

- 59. (1) Prior to construction, the Owner shall submit the following to the District Manager and Director:
  - (a.) A plan for monitoring and mitigation of landfill gas and hydrogen sulphide during the operation of the Facility prepared by a Professional Engineer. The landfill gas monitoring and mitigation plan for operations shall include at minimum:
    - (i.) An assessment of the potential for methane and hydrogen sulphide migration to all existing and any proposed enclosed infrastructure and below grade infrastructure at the Facility;
    - (ii.) A description of indoor air monitoring of all existing and any proposed enclosed infrastructure at the Facility;
    - (iii.) A description of monitors with audible/visual alarms for methane concentrations and hazardous hydrogen sulfide concentrations within all existing and any proposed enclosed infrastructure and below grade infrastructure at the Facility;
    - (iv.) A description of trigger levels for methane and hydrogen sulphide associated with the audible/visual alarms at the Facility; and

- (v.) A description of a contingency plan with immediate corrective actions that would be implemented in the event the trigger levels are exceeded during operation at the Facility.
- (b.) A plan for monitoring and mitigation of landfill gas and hydrogen sulphide during construction prepared by a Professional Engineer. The landfill and hydrogen sulphide gas monitoring and mitigation plan for construction shall include at minimum:
  - (i.) A description of methane and hydrogen monitoring during construction activities:
  - (ii.) A description of trigger levels for methane and hydrogen sulphide during construction activities; and
  - (iii.) A description of a contingency plan with immediate corrective actions that would be implemented in the event the trigger levels are exceeded during construction at the Facility.
- (2) Upon approval of the above referenced plans in condition 59 (1) by the District Manager, the Owner shall implement the plans forthwith. No construction shall take place until the District Manager has approved the above referenced plans.
- (3) The District Manager shall be notified immediately should there be any detection above trigger values or if a contingency plan is implemented during construction or operation at the Facility. The notification shall include a description of any mitigative, or corrective actions taken. A report outlining the actions taken and any proposed changes to the landfill gas monitoring and mitigation plans for construction and operation shall be submitted to the District Manager within sixty (60) days of any detection above trigger values or the implementation of any contingency plan.
- (4) The Owner shall provide a report outlining a summary of the findings of the landfill gas monitoring and mitigation plan for construction to the District Manager within 60 days upon completion of construction.
- (5) The Owner shall provide an annual report outlining a summary of the findings of the landfill gas monitoring and mitigation plan for operations to the District Manager by July 31 of each year.

# SCHEDULE "A" Facility Description

The Facility shall consist of the construction, installation, operation, use, maintenance and retiring of:

- a Class 3 anaerobic digestion facility, to process a maximum of 159,000 tonnes of solid and liquid Organic Waste per year to generate 1,060 kilowatts of electricity (kW<sub>el</sub>) and consisting of the following processes, working areas and supporting units:

#### For Phase 0:

- one (1) inbound weight scale;
- one (1) outdoor Liquid Unloading Station consisting of:
  - o an impermeable concrete unloading pad with a 1-2% slope towards drains for the collection of any spills during unloading, discharging to the Liquid Receiving Tanks via gravity pipes;
  - o three (3) 493 m³ working capacity outdoor in-ground lined-concrete Liquid Waste Receiving Tanks, used for the receipt and temporary storage of liquid organic waste, as well as for holding and storage of organic slurry from the waste pre-processing units, each equipped with heat-exchangers, two (2) agitators, a level sensor, temperature sensor, and low-level and high-level alarms, discharging waste to either the Pasteurization System or the Anaerobic Digesters, and discharging odourous air through the Activated Carbon Adsorption Units described below and occasionally operating as an open area source when the tank is being filled using a dump trailer;
- two (2) Pasteurization Systems in parallel, each with a rated capacity of 23,500 tonnes per year, each consisting of three (3) 3.5 m<sup>3</sup> stainless-steel tanks in parallel equipped with a centrally located thermocouple, heat-exchanger system and high-level alarms, discharging waste to the Anaerobic Digesters, and discharging odourous air through the Activated Carbon Adsorption Units described below;
- two (2) Activated Carbon Adsorption Units complete with pre-filter sections, one (1) unit is used to control emissions from the three (3) liquid waste receiving tanks and one (1) unti is used to control emissions from the two (2) pasteurization systems, each unit containing at least 45 kilograms of activated carbon, discharging to the air passively through independent stacks;
- two (2) 2,166 m³ working capacity outdoor in-ground lined-concrete Anaerobic Digesters with sealed concrete roofs, each equipped with over and under

pressure relief devices, skimmers, heat-exchangers, agitators, a level sensor, pressure sensor, temperature sensor, dosing systems for ferric chloride/micronutrients/anti-foamers, and low-level and high-level alarms, discharging to the Skimming Building;

- one (1) Skimming Building, consisting of:
  - o a screw press with less than 2.5 square centimetre screen openings, for the removal of foreign matter from the skimmed Digestate, having a minimum rated capacity of 10 tonnes/hour, discharging the scum Residual Waste to the designated storage bin and the screened Digestate to the Digestate Storage Tanks or the Anaerobic Digesters;
  - o a 5 m<sup>3</sup> enclosed bin for the storage of scum Residual Waste, for transfer to the Residual Waste dewatering press within the Organics Receiving Building;
  - o a watersealed-concrete floor with a 1-2% slope towards the building floor drains for the capture of any spills/run-off, discharging to the Liquid Receiving Tanks via a pump and forcemain; and
  - o one (1) ventilation system serving the Skimming Building, drawing air from the screw press system and the scum Residual Waste storage area, discharging to the air at a maximum volumetric flow rate of 0.94 cubic metres per second through a stack, having an exit diameter of 0.50 metres, extending 2.5 metres above grade;
- two (2) plug flow digesters which are not permitted to be operated during any Phase;
- a ferric chloride or equivalent dosing system, consisting of a maximum of three (3) 6 m<sup>3</sup> double-walled tanks with pumps for dosing into the Anaerobic Digesters;
- two (2) 4,029 m³ working capacity outdoor in-ground lined-concrete Digestate Storage Tanks with sealed concrete roofs, each equipped with over and under pressure relief devices, pressure sensor, agitators, a level sensor, temperature sensor, and low-level and high-level alarms;
- one (1) Digestate Loading Station used for truck load-out of digestate via a camlock connection or overhead fill station;
- two (2) membrane Biogas Storage Bladders with a total working capacity of 884 m<sup>3</sup>, equipped with over and under pressure relief devices, discharging Biogas to the Biogas-CHP Treatment System;
- one (1) Biogas-CHP Treatment System including:
  - o one (1) gas cooler to remove moisture;

- o one (1) carbon adsorber for desulphurization of the biogas before directing it to the generators described below; and
- o one (1) Biogas Fired Reciprocating Engine Generator, having a generating output capacity of 1,060 kilowatts of electricity (kW) and a maximum biogas firing rate of 0.134 standard cubic metre per second, discharging to the air through an independent stack having an approximate volumetric flow rate of 1.20 actual cubic metres per second, having an exit diameter of 0.30 metre, extending 10.0 metres above grade;
- one (1) Flare, operating during the commissioning period or as a standby biogas combustion control device to the one (1) biogas reciprocating engine generator, having a maximum biogas firing rate of 0.125 standard cubic metre per second, discharging to the air through a stack with an exit diameter of 0.9 metre, extending
  - 9.0 metres above grade; and
- one (1) propane fired boiler, having a maximum heat input in the range of 128,189 kilojoules per hour to 896,797 kilojoules per hour;

## For Phase 1:

- All of the processes, working areas and supporting units listed under Phase 0, except for the Biogas Storage Bladder which is to be decommissioned under Phase 1 and the digestate loading station and the Flare which is to be replaced as described below;
- One (1) Organics Receiving Building consisting of:
  - o four (4) receiving bays for the receipt of bulk Organic Waste;
  - o one (1) dock-level receiving bay for the receipt of packaged Organic Waste;
  - o Waste Receiving Area with a solid Organic Waste storage capacity of approximately 1,870 m³ (including the empty, unclean containers) and heavy Residual Waste storage capacity of 5 m³, consisting of a washing station for Trucks and empty containers, a watersealed-concrete floor with a 1-2% slope towards the building floor drains to capture all truck washwater and run-off from the Organic Waste storage area for discharge into the Liquid Receiving Tanks, and either:
    - an approximately 625 m<sup>2</sup> tipping floor equipped with a metal push wall and a front-loader for transferring the waste into the hoppers; or
    - a pit and grapple system;
  - o One (1) hopper with an enclosed conveyer for the transfer of Organic Waste from the Waste Receiving Area to the Pre-Processing Area;
  - o Pre-Processing Area consisting of:
    - one (1) Organic Waste de-packaging unit which minimizes the production of plastics with lengths of less than 5 mm, with a

minimum rated capacity of 15 tonnes of Organic Waste/hour, to generate:

- an Organic Waste paste which is transferred to either the Liquid Receiving Tanks for digestion via an enclosed conveyance system or the one (1) trailer within the Residual Waste Storage via enclosed conveyers for off-site shipping, and
- light Residual Waste which is transferred to the Residual Waste dewatering press via a conveyance system;
- One (1) Residual Waste dewatering press with a minimum capacity of 10 tonnes/hour for the dewatering of the heavy Residual Waste from the Waste Receiving Area, the light Residual Waste from the de-packaging units and the grit/scum Residual Waste from the Skimming and Grit/Skimming Buildings, discharging the liquid waste to the Liquid Receiving Tanks via a forcemain and the dewatered Residual Waste to the two (2) Residual Waste storage trailers via conveyors;
- Residual Waste Storage Area consisting of two (2) 47.5 m Residual
  Waste storage trailers during normal operations and two (2) loading
  bays, with the option of using one of the two loading bay doors for
  the loading of Organic Waste paste from the de-packaging units; and
- a watersealed-concrete floor with a 1-2% slope towards the building floor drains for the capture of any spills, discharging to the Liquid Receiving Tanks via a pump and forcemain;
- o Ventilation system, that maintains cascading negative air pressure in the Organics Receiving Building, with a ventilation rate ranging from one (1) to two (2) air changes per hour in the Shop Area, two (2) to five (5) air changes per hour in the Pre-Processing Area and two (2) to five (5) air changes per hour in the Waste Receiving Area, extracting air from the areas including but not limited to the bay doors, reception area, tipping floor area, solid waste storage area, pre-processing area, residue/reject collection, storage and load-out area, and reception floor sump, then discharging odourous air through the Biofilter described below;
- o one (1) Biofilter, divided into two cells containing organic or inorganic media, used to control emissions from the Organics Receiving Building, equipped with two (2) wet water scrubbers operating in parallel for humidification, and discharging to the air at a total maximum volumetric flow rate of 21.8 cubic metres per second through a stack, having an exit diameter of 1.47 metres, extending 17.0 metres above the roof and 20.0 metres above grade;
- a compacted clay, concrete or asphalt outdoor secondary spill containment area (the Tank Farm), having a minimum containment volume of 8,441 m<sup>3</sup> and a

permeability of less than 1x10-6 cm/s, containing the following:

- o the Phase 0 Anaerobic Digesters and Digestate Storage Tanks;
- o any number of partially in-ground concrete or steel Anaerobic Digesters with fixed roofs, provided that the total working capacity is approximately 6,870 m³ (not including the Phase 0 Anaerobic Digesters) and the maximum above-grade
  - storage tank volume is 2,972 m<sup>3</sup>, each tank equipped with insulation, an anti-corrosive liner in the headspace, over and under pressure relief devices, in-vessel skimmers and floor sweepers, heat-exchangers, agitators, a level sensor, pressure sensor, temperature sensor, dosing systems for ferric chloride/micronutrients/anti-foamers, and low-level and high-level alarms, discharging to the Grit/Skimming Building;
- o one (1) partially in-ground concrete Digestate/Biogas Storage Tank with a double-membrane 1/2 dome roof with a maximum permeability of 200 cm<sup>3</sup>/m<sup>2</sup>/bar/day, having a Digestate storage volume of approximately 8,000 m<sup>3</sup>, a Biogas storage volume of approximately 10,500 m<sup>3</sup> and a maximum above-grade storage tank volume of 6,593 m<sup>3</sup>, equipped with an anti-corrosive liner in the headspace, over and under pressure relief devices, pressure sensor, heat-exchangers, agitators, a level sensor, a minimum of two (2) temperature sensors, and low-level and high-level alarms;
- one (1) Grit/Skimming Building, consisting of:
  - o a screw press with less than 2.5 square centimetre screen openings, for the removal of foreign matter from the skimmed Digestate, discharging the scum Residual Waste to the designated storage bunker and the screened Digestate to the Digestate Storage Tanks, the Digestate/Biogas Storage Tank(s) or the Anaerobic Digesters;
  - o a grit separation tank with integrated auger for the removal of foreign matter from the swept Digestate, discharging the grit Residual Waste to the designated storage bunker and the Digestate to the Anaerobic Digesters;
  - o a 9 m³ three-sided bunker for the storage of grit/scum Residual Waste, for transfer to the Residual Waste dewatering press within the Organics Receiving Building; and
  - o a watersealed-concrete floor with a 1-2% slope towards the building floor drains for the capture of any spills/run-off, discharging to the Liquid Receiving Tanks via a pump and forcemain;
  - one (1) ventilation system serving the Grit/Skimming Building, drawing air from the screw press system and the grit/scum Residual Waste storage area, discharging to the air at a maximum volumetric flow rate of 0.94 cubic metres per second through a stack, having an exit diameter of 0.50 metres,

extending 2.5 metres above grade;

- one (1) Biogas-RNG Upgrading System, consisting of:
  - o one (1) Biogas Pre-Treatment System including dehumidification and desulphurization steps, as well as equipment for the removal of siloxanes and volatile organic compounds;
  - o one (1) packaged Biogas Upgrading System, used to produce renewable natural gas from Biogas, using pressure swing adsorption or double-membrane technology, with the off-gas from the system discharging to the air at a maximum volumetric flow rate of 25.7 cubic metres per second, through a stack having an exit diameter of up to 1.28 metres, extending 2.0 metres above the roof and 5.0 metres above grade; and
  - a spill containment area for any necessary reagent storage and processing vessels that contain liquids;
- replacement of the Phase 0 Flare with one (1) Flare, operating as a standby Biogas combustion control device during periods when the Biogas upgrading/treatment systems are down, when Biogas generation exceeds the capacity of the Biogas upgrading/treatment systems or when Biogas generation from the Digestate/Biogas Storage Tank and Biogas Storage Bladder requires flaring, having a maximum biogas firing rate of 0.824 standard cubic metre per second, discharging to the air through a stack with an exit diameter of 2.64 metres, extending 12.3 metres above grade;
- five (5) propane/natural gas dual fired boilers, to be used for heating of the Anaerobic Digesters and the Pasteurization Systems, each having a maximum heat input in the range of 4,000,000 kilojoules per hour to 7,500,000 kilojoules per hour;
- Replacement of the Phase 0 Digestate Loading Station with one (1) impermeable
  - concrete Digestate Loading Station for the loading of tankers via a camlock connection or overhead fill station, having a 1-2% slope towards the Tank Farm for the collection of any spills during loading;
- Either:
  - o two (2) tube trailers for the storage of compressed Renewable Natural Gas for off-site injection in to the natural gas infrastructure (virtual pipeline) or direct transfer to end users; OR
  - o one (1) Renewable Natural Gas injection point into the natural gas infrastructure;
- one (1) outbound weight scale;

### For Phase 2:

- All of the processes, working areas and supporting units listed under Phase 1;
- Within the Organics Receiving Building:
  - One (1) additional hopper with an enclosed conveyer, for a total of two (2) hoppers, for the transfer of Organic Waste from the Waste Receiving Area to the Pre-Processing Area;
  - o Within the Pre-Processing Area:
    - one (1) additional Organic Waste de-packaging unit which minimizes the production of plastics with lengths of less than 5 mm, for a total of two (2) de-packaging units operating in parallel, each with a minimum rated capacity of 15 tonnes of Organic Waste/hour, to generate:
      - an Organic Waste paste which is transferred to either the Liquid Receiving Tanks for digestion or the one (1) trailer within the Residual Waste Storage via enclosed conveyers for off-site shipping, and
      - light Residual Waste which is transferred to the Residual Waste dewatering press via enclosed conveyers;

#### • Within the Tank Farm:

- any number of partially in-ground concrete or steel Anaerobic Digesters with fixed roofs, provided that the total working capacity is approximately 6,870 m³ (not including the Phase 0 and Phase 1 Anaerobic Digesters) and the maximum above-grade storage tank volume is 2,972 m³, each tank equipped with insulation, an anti-corrosive liner in the headspace, over and under pressure relief devices, in-vessel skimmers and floor sweepers, heat-exchangers, agitators, a level sensor, pressure sensor, temperature sensor, dosing systems for ferric chloride/micronutrients/anti-foamers, and low-level and high-level alarms, discharging to the Grit/Skimming Buildings;
- o either:
  - one (1) partially in-ground concrete Digestate/Biogas Storage Tank with a double-membrane 1/2 dome roof with a maximum permeability of 200 cm³/m²/bar/day, having a Digestate storage volume of approximately 8,000 m³, a biogas storage volume of approximately 10,500 m³ and a maximum above-grade storage tank volume of 6,593 m³, equipped with an anti-corrosive liner in the headspace, over and under pressure relief devices, pressure sensor, heat-exchangers, agitators, a level sensor, a minimum of two (2) temperature sensors, and low-level and high-level alarms; or

- one (1) 10,500 m³ double-membrane Biogas Storage Bladder with a maximum permeability of 200 cm³/m²/bar/day, equipped with over and under pressure relief devices, pressure sensor, and a temperature sensor;
- one (1) additional Grit/Skimming Building, for a total of two (2) Grit/Skimming Buildings, consisting of:
  - o a screw press with less than 2.5 square centimetre screen openings for the removal of foreign matter from the skimmed Digestate, discharging the grit/scum Residual Waste to the designated storage bunker and the screened Digestate to the Digestate Storage Tanks, the Digestate/Biogas Storage Tank(s) or the Anaerobic Digesters;
  - o a grit separation tank with integrated auger for the removal of foreign matter from the swept Digestate, discharging the grit Residual Waste to the designated storage bunker and the Digestate to the Anaerobic Digesters;
  - o a 9 m<sup>3</sup> three-sided bunker for the storage of grit/scum Residual Waste, for transfer to the Residual Waste dewatering press within the Organics Receiving Building; and
  - o a watersealed-concrete floor with a 1-2% slope towards the building floor drains for the capture of any spills/run-off, discharging to the Liquid Receiving Tanks via a pump and forcemain;
- one (1) additional Biogas-RNG Upgrading System, consisting of:
  - o one (1) Biogas Pre-Treatment System including dehumidification and desulphurization steps, as well as equipment for the removal of siloxanes and volatile organic compounds;
  - o one (1) packaged Biogas Upgrading System, used to produce renewable natural gas from Biogas, using pressure swing adsorption or double-membrane technology, with the off-gas from the system discharging to the air at a maximum volumetric flow rate of 25.7 cubic metres per second, through a stack having an exit diameter of up to 1.28 metres, extending 2.0 metres above the roof and 5.0 metres above grade; and
  - o a spill containment area for any necessary reagent storage and processing vessels that contain liquids;

all in accordance with the Application.

# SCHEDULE "B" Digestate Storage Volume Requirements

Receipt Rate Thresholds (tonnes per year)	Minimum Digestate Storage Volume Requirement (cubic metres)	
33,000	11,507	
40,000	12,945	
45,000	14,384	
50,000	15,822	
55,000	17,260	
60,000	18,699	
65,000	20,137	
70,000	21,575	
75,000	23,014	
80,000	24,452	
85,000	25,890	
90,000	27,329	
95,000	28,767	
100,000	30,205	
105,000	31,644	
110,000	33,082	
115,000	34,521	
120,000	35,959	
125,000	37,397	

### SCHEDULE "B" Digestate Storage Volume Requirements

Receipt Rate Thresholds (tonnes per year)	Minimum Digestate Storage Volume Requirement (cubic metres)
130,000	38,836
135,000	40,274
140,000	41,712
145,000	43,151
150,000	44,589
155,000	45,740

# SCHEDULE "C" Groundwater Monitoring Program

Location	Minimum Frequency	Parameters
In-ground Tank Monitoring:	Semi-annually*	<u>Laboratory:</u>
Liquid Receiving Tank well		Metals: iron, manganese
and the Tank Farm sump		
		Anions: chloride, nitrate, nitrite, sulphate
		Cations: sodium
		Various: BOD, ammonia, TDS, phosphorus
		Field: pH
In-ground Tank Monitoring: Liquid Receiving Tank well and the Tank Farm sump	Daily	Visual check for signs of contamination (colour, turbidity, oil sheen, etc.)
Groundwater: MW1S,	Semi-annually*	<u>Laboratory:</u>
MW1D, MW2, MW3S,		Metals: iron, manganese
MW3D, MW4, MW5S, MW5D, MW6, MW7S and MW7D		Anions: chloride, nitrate, nitrite, sulphate
		Cations: sodium
		Various: BOD, ammonia, TDS, phosphorus
		<u>Field:</u> pH, water level

<sup>\*</sup>The Semi-annually groundwater monitoring is only required to be carried out for a period of four (4) years, at which time the Company is approved to reduce the sampling frequency to annually.

#### SCHEDULE "D"

# 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:

$$X_{10\text{min}} = X_{60\text{min}} * 1.65$$
  
where  $X_{10\text{min}} = 10$ -minute average concentration  $X_{60\text{min}} = \text{one-hour}$  average concentration

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

### SCHEDULE "E" Source Testing Procedures

- 5. 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.
- 6. The Company shall not commence the Source Testing required under this Approval until the Manager has approved the Pre-Test Plan.
- 7. 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.
- 8. 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 Biofilter (and Organics Receiving Building), Skimming Building, the Grit/Skimming Buildings and Liquid Waste Receiving Tanks 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 Biofilter, monitored parameters of the Biofilter, etc.;
    - c. description of the emission sources controlled by the Biofilter at the time of testing;
    - d. records of weather conditions such as ambient temperature and relative humidity, wind speed and direction at the time of testing; and
    - e. operational description of the general building ventilation serving the Organics Receiving Building, the Skimming Building and the Grit/Skimming Buildings at the time of testing;
  - 4. results of Source Testing, including the emission rate, emission concentration, relevant emission factor of total reduced sulphur and odour from the Biofilter, Skimming Building, Grit/Skimming Buildings and Liquid Waste Receiving Tanks;

and

- 5. a tabular comparison of calculated emission rates and emission factors based on Source Testing results for total reduced sulphur and odour to relevant estimates described in the ESDM Report.
- 9. 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.
- 10. 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.
- 11. 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 the calculated emission rates from the Source Testing 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. 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 E.

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

- 1. Conditions 1, 6 and 7 are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in the manner in which it was described for review and upon which Approval was granted.
- 2. Conditions 2 and 3 are included to require the Company to provide information to the public and the local municipality.
- 3. Conditions 4, 5, 8, 9, 10, 11, 12, 17, 18, and 19 are included to clarify the legal rights and responsibilities of the Company.
- 4. Condition 13 is included to ensure that the Facility is operated under the corporate name which appears on the Application submitted for this Approval and to ensure that the Director is informed of any changes.

- 5. Conditions 14 and 15 is included to restrict potential transfer or encumbrance of the Facility without the approval of the Director and to ensure that any transfer of encumbrance can be made only on the basis that it will not endanger compliance with this Approval.
- 6. Condition 16 is included to ensure that the Ministry has ready access to the operations of the Facility. The condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA, the OWRA, the PA, the NMA and the SDWA.
- 7. Conditions 20, 21, and 22 are included to ensure that the Facility is decommissioned in accordance with the Decommissioning Plan Report approved by the Ministry and that final closure of the Facility is completed in accordance with Ministry's standards.
- 8. Conditions 23 and 24 are intended to limit the time period of the Approval.
- 9. Conditions 25 and 26 are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in a way that does not result in an Adverse Effect or hazard to the natural environment or any persons.
- 10. Conditions 27, 28, 29 and 30 are included to emphasize that the Equipment/Facility must be maintained and operated according to a procedure that will result in compliance with the Act, the Regulations and this Approval. Conditions 31 and 43(20) are included to require the Company to gather accurate information so that compliance with the Act, the Regulations and this Approval can be verified.
- 11. Conditions 32 and 33 are included to provide the minimum performance requirement considered necessary to prevent an Adverse Effect resulting from the operation of the Facility.
- 12. Conditions 34 and 35 are included to ensure that a copy of the approved Design and Operations Report is available on-site at all times for reference.
- 13. Condition 36 is included to ensure that sufficient funds are available to the Ministry to clean up the Facility in the event that the Company is unable or unwilling to do so.
- 14. Condition 37 is included to require the Company to respond to any environmental complaints regarding the operation of the Facility, according to a procedure that includes methods for preventing recurrence of similar incidents and a requirement to prepare and retain a written report.
- 15. Condition 38 is included to specify the approved Organic Waste receipt rate, service area from where Organic Waste may be accepted and the approved Organic Waste types.
- 16. Condition 39 is included to ensure that the Facility's users, operators and the public are fully aware of important information and restrictions related to the operation of the Facility.
- 17. Condition 40 is included to ensure that the Facility is sufficiently secured, supervised and operated by properly trained personnel and to ensure controlled access and integrity of the Facility by preventing unauthorized access when the Facility is closed and no Facility personnel are on duty.

- 18. Condition 41(1) is included to specify the hours of operation for the Facility to ensure that the hours of the Facility's operations do not result in an Adverse Effect or hazard to the natural environment or any persons.
- 19. Conditions 41(2), 41(5), 41(6), and 41(10) to 41(39) are included to ensure that waste handling and storage are undertaken in a way which does not result in a nuisance, Adverse Effect or hazard to the natural environment or any persons.
- 20. Condition 41(3) is included to ensure that only the approved waste types are accepted and processed at the Facility.
- 21. Conditions 41(4), 41(7), 41(8) and 41(9) are included to specify the requirements for handling of the Rejected Waste that was inadvertently received at the Facility.
- 22. Condition 42 is included to require the Facility to be maintained and inspected thoroughly and on a regular basis to ensure that the operations at the Facility are undertaken in a manner which does not result in an Adverse Effect or hazard to the natural environment or any persons.
- 23. Conditions 43, 44 and 45 are included to require all Organic Waste received at the Facility and shipped from the Facility to be characterized so that only Organic Waste approved by this Approval is handled at the Facility and that all waste transferred off-site is handled in accordance with the Ministry's requirements.
- 24. Conditions 44 and 45 are also included to ensure that all processed Organic Waste is properly managed, processed and disposed of in accordance with the Ministry's regulatory requirements and in a manner that protects the health and safety of the public and the environment.
- 25. Condition 46 is included to ensure that the Facility is operated and maintained in an environmentally acceptable manner which does not result in a nuisance, Adverse Effect or hazard to the natural environment or any persons.
- 26. Conditions 47 and 48 are included to ensure that personnel employed at the Facility are fully aware and properly trained on the requirements and restrictions related to the Facility operations under this Approval.
- 27. Condition 49 is included to ensure that the Company is prepared and properly equipped to take action in the event of an emergency situation.
- 28. Condition 50 is included to require further spill notification to the Ministry, in addition to the requirements already listed in Part X of the Act, and to ensure that the Facility is constructed, installed, used, operated, maintained and retired in a way that does not result in an Adverse Effect or hazard to the natural environment or any persons.
- 29. Condition 51 is included to ensure that detailed records of Facility activities, inspections, monitoring and

upsets are recorded and maintained for inspection and information purposes.

- 30. Conditions 52, 53, 54, 55, and 56 are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in a way that does not result in an Adverse Effect or hazard to the natural environment or any persons.
- 31. Condition 57(1) is included as the temporary sediment and erosion control measures are required to mitigate the impact on the downstream receiving watercourse during construction until they are no longer required.
- 32. Condition 57(2) is included to ensure that the Facility stormwater management works are constructed in accordance with the Approval and that records of drawings of the stormwater management works "as constructed" are maintained for future reference.
- 33. Conditions 58 and 59 are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in a way that does not result in an Adverse Effect or hazard to the natural environment or any persons.

## This amended Renewable Energy Approval revokes and replaces Approval No. 8541-9HSGG3 issued on October 1, 2014 and all subsequent notices and amendments to this date.

In accordance with Section 139 of the *Environmental Protection Act*, within 15 days after the service of this notice, you may by further written notice served upon the Director and the Ontario Land Tribunal require a hearing by the Tribunal. You must also provide notice to the Minister of the Environment, Conservation and Parks in accordance with Section 47 of the *Environmental Bill of Rights*, 1993, who 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 renewable energy approval or each term or condition in the renewable energy 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 <u>each</u> portion appealed.

The signed and dated notice requiring the hearing should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The renewable energy approval number;
- 4. The date of the renewable energy approval;

and

- 5. The name of the Director;
- 6. The municipality or municipalities within which the project is to be engaged in;

This notice must be served upon:

Registrar\*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3 The Director Section 47.5, *Environmental Protection Act* Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor

and

\* Further information regarding the requirements and procedures of the Ontario Land Tribunal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

Under Section 142.1 of the *Environmental Protection Act*, residents of Ontario may require a hearing by the Ontario Land Tribunal within 15 days after the day on which notice of this decision is published in the Environmental Registry. By accessing the Environmental Registry at <a href="https://ero.ontario.ca/">https://ero.ontario.ca/</a>, you can determine when this period ends.

Approval for the above noted renewable energy project is issued to you under Section 47.5 of the *Environmental Protection Act* subject to the terms and conditions outlined above.

DATED AT TORONTO this 21st day of November, 2025

Mohsen Keyvani, P.Eng.

Director

Section 47.5, Environmental Protection Act

KD/

c: District Manager, MECP Niagara
Peter Lee, Escarpment Renewables
Mike Kopansky, Miller Waste Systems