

AMENDED RENEWABLE ENERGY APPROVAL
NUMBER 5211-CM3MB6
Issue Date: August 26, 2026

The Corporation of the Town of Petawawa
1111 Victoria St
Petawawa, Ontario
K8H 2E6

Site Location: Petawawa Water Pollution Control Plant
560 Abbie Lane
Petawawa Town, County of Renfrew
K8H 2X2

You are hereby notified that, in accordance with Section 47.5 of the Environmental Protection Act, I am amending Renewable Energy Approval No. 5211-CM3MB6 issued on April 25, 2023, 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 with a nameplate capacity of 200 kilowatts of electricity (kW_e) as outlined in Schedule "A" to:

- receive, temporarily store and process a maximum of 36,135 tonnes of liquid Organic Waste per year;

Note: use of the facility 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 Cambium Inc., dated October 7, 2022, and signed by Trevor Copeland, P. Eng.
2. "Act" means the Environmental Protection Act, R.S.O 1990, c.E.19, as amended;
3. "Adverse Effect" has the same meaning as in the Act;
4. "Anaerobic Digester" means the Anaerobic Digester(s) used for anaerobic digestion of the approved Organic Waste and as defined in Reg. 347;

5. "Application" means the application for a Renewable Energy Approval dated August 17, 2022, and signed by David Unrau, Director of Public Works, Town of Petawawa, and all supporting documentation submitted with the Application up to the date of this approval; and as further amended by the application for an amendment to a Renewable Energy Approval dated December 10, 2025, and signed by Chris Mantha, Director of Public Works, Town of Petawawa and all supporting documentation submitted with the application, including amended documentation submitted up to the date this amendment is issued;
6. "Approval" means this Renewable Energy Approval issued in accordance with Section 47.5 of the Act, including any schedule attached to it;
7. "Best Management Practices for Industrial Sources of Odour" means the Ministry Publication "Best Management Practices for Industrial Sources of Odour", dated January 31, 2017, as amended;
8. "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;
9. "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;
10. "Clean-Out Material" means the Residual Waste removed from the Digester due to floating or settling of the material and that has been recovered as part of maintenance of the Digester;
11. "Company" means the Corporation of the Town of Petawawa that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the Act;
12. "Decommissioning Plan Report" means the report entitled "Petawawa Net Zero Facility Decommissioning Plan Report, June 20, 2025";
13. "Design and Operations Report" means the report entitled "Petawawa Net Zero Facility, Design and Operations Report, May 29, 2026";
14. "Desulphurization System" means the desulphurization system in the Biogas-CHP Treatment 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;

15. "Digestate" is a Processed Organic Waste and within the context of this Approval it means the output from the Digestate Storage Tanks;

16. "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;

17. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;

18. "EASR" means the Environmental Activity and Sector Registry;

19. "Equipment" means the equipment and processes described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;

20. "Exhausted" means the capacity of the Biogas-CHP Treatment System to adsorb emissions is reached and the Biogas-CHP Treatment System cannot effectively condition the biogas for use in the CHP engine set;

21. "Facility" means the renewable energy generation facility, located at Petawawa Water Pollution Control Plant, 560 Abbie Lane, Petawawa Town, County of Renfrew, including the Equipment, as described in this Approval and as further described in the Application, to the extent approved by this Approval;

22. "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;

23. "Flare" means the biogas 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;

24. "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;

25. "Groundwater Monitoring Plan" means the plan included in the Application titled "Groundwater Monitoring Plan for the Petawawa Net-Zero Project Cambium Reference: 11757-004", dated October 9, 2024, prepared by Cambium Inc. and signed and

stamped by Kyle Horner, P.Geo. on October 9, 2024;

26. "IC&I" means industrial, commercial and institutional;

27. "Incoming Organic Waste" within the context of this Approval means liquid non-hazardous organic waste derived from plants, humans or animals that is readily biodegradable and suitable for microbial biodegradation conducted under anaerobic conditions, but not including the sewage sludge generated at the on-site municipal wastewater treatment plant;

28. "Manual" means a document or set of documents that provide written instruction to staff of the Company;

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

30. "NASM" or "Non-agricultural Source Material" has the same meaning as in O. Reg. 267/03;

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

32. "Noise Control Measures" means measures to reduce the noise emission from the Facility and/or Equipment including, but not limited to silencers, acoustic louvers, enclosures, absorptive treatment, plenums and barriers. It also means the noise control measures outlined in the Acoustic Assessment Report;

33. "Odour Management Plan" means the most recent document or a set of documents which describes the measures to minimize odour emissions from the Facility and/or Equipment ;

34. "O. Reg. 267/03" means Ontario Regulation 267/03 "General" made under the NMA;

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

36. "Organic Waste" means liquid non-hazardous organic waste derived from plants, humans or animals that is readily biodegradable and suitable for microbial biodegradation conducted under anaerobic conditions;

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

amended;

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

39. "Processed Organic Waste" has the same meaning as in Reg. 347;

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

41. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995 as amended;

42. "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;

43. "Reg. 347" or "Regulation 347" means Regulation 347 "General - Waste Management", R.R.O. 1990, made under the Act;

44. "Rejected Waste" means the Incoming Organic Waste received at the Facility that does not meet the incoming waste quality criteria set out in this Approval or which cannot be anaerobically digested (processed);

45. "Residual Waste" means waste resulting from the storage and/or processing of the Organic Waste at the Facility and which cannot be anaerobically digested (processed) and is destined for Final Disposal;

46. "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;

47. "Septage" within the context of this Approval means contents removed from septic tanks, portable toilets, privy vaults and holding tanks serving houses, schools, motels, mobile home parks, campgrounds and small commercial endeavors, all receiving sewage from domestic sources only;

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

49. "Source Separated Organics" or "SSO" means the source separated organic waste which consists of the organic waste suitable for anaerobic digestion, which has been separated at its source of origin by the generator of the waste and including the bags used by the generator to encase the organic waste at the source of generation;

50. "Spill" is as defined in the Act;

51. "Stormwater Management and Secondary Containment Design Report" means the report included in the Application titled "Petawawa Net-Zero Project Stormwater Management and Secondary Containment Design Report", "Stormwater-Secondary Containment Grading Plan" dated April 13, 2026, prepared by Stonecrest Engineering Inc. and signed and stamped by N. Hendry, P.Eng. on April 13, 2026 and "Supplementary Information to support the Stormwater Secondary Containment Design Report" dated June 19, 2026 by the Company;

52. "Trained Personnel" means competent personnel that have been trained through instruction and/or practice in accordance with condition K1 of this Approval; and

53. "Works" means the sewage Works described in the Company's application, and this Approval.

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

TERMS AND CONDITIONS

A - GENERAL

Compliance

A1. 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 and in accordance with the following schedules attached hereto:

Schedule "A" – Facility Description;

A2. The Company shall ensure a copy of this Approval is:

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

A3. 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 ten (10) business days of receiving this Approval.

A4. 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.

A5. Any person authorized to carry out work on or operate any aspect of the Facility shall comply with the conditions of this Approval .

A6. The Company shall provide the District Manager and the Director at least ten (10) days written notice to the commencement of any construction or installation activities at the project location.

Interpretation

A7. 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.

A8. 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

A9. 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

A10. 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 Effect.

A11. 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.

A12. 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.

A13. 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

A14. 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 Business Names Act , R.S.O. 1990, c. B.17, as amended, shall be included in the notification; and

(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.

A15. 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.

A16. In the event of any change in ownership of the Facility, 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

A17. 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

A18. 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 .

A19. 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.

A20. 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

A21. 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.

A22. The Facility shall be retired in accordance with the Decommissioning Plan Report approved by the Director.

A23. Upon commencement of the retirement of the Facility, the Company shall ensure that the stormwater management works described in Schedule "A" remain operational and not be decommissioned until:

- a. the Class 3 anaerobic digestion facility has been fully decommissioned;
- b. all Organic Waste, Digestate and other materials having the potential to cause a spill or discharge have been removed from the Site or otherwise appropriately managed; and
- c. all activities for which the stormwater management works may be required to provide stormwater management or spill containment have been completed.

A24. 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.

Approval for Phase 0 under the Design and Operations Report

A25. This Approval only approves the design set out for Phase 0 under the Design and Operations Report. An amendment to this Approval is required for all other phases (Phase 1-2) of development described under the Design and Operations Report.

B - EXPIRY OF APPROVAL

B1. Construction and installation of the Facility as described in the Application must be completed within three (3) years of the later of:

- (1) the date this Amendment is issued; or
- (2) if there is a hearing or other litigation in respect of the issuance of this Amendment, the date that this hearing or litigation is disposed of, including all appeals.

B2. This Approval ceases to apply in respect of any portion of the Facility not constructed or installed before the later of the dates identified in Condition B1.

C - ARCHAEOLOGICAL RESOURCES

C1. Should any archaeological resources be discovered, the Company shall:

- (1) immediately cease all alteration of the area in which the resources were discovered;
- (2) engage a consultant archaeologist to carry out the archaeological fieldwork necessary to further assess the area and to either protect and avoid or excavate any sites in the area in accordance with the Ontario Heritage Act, the regulations under that act and the Ministry of Citizenship and Multiculturalism's Standards and Guidelines for Consultant Archaeologists; and
- (3) notify the Director and District Manager as soon as reasonably possible and within 30 days.

D - NATURAL HERITAGE

D1. The Company shall implement the commitments made in the Environmental Impact Study report "Environmental Impact Study - Proposed Anaerobic Digester at the Petawawa Water Pollution Control Plant" dated January 25, 2023, prepared by Cambium Inc. and included in the Application, and which the Company submitted to the Ministry of Natural Resources and Forestry in order to comply with O. Reg. 359/09.

D2. The Company shall provide a summary of the implemented commitments from the Environmental Impact Study report in the annual report in accordance with condition N9 of this Approval.

E - TRAFFIC MANAGEMENT

E1. The Company shall prepare a traffic management plan and make it available to the Ministry upon request. The Company shall share any updates to the above-mentioned plan within three (3) months to the County of Renfrew.

E2. Within three (3) months of having provided the traffic management plan or update thereof to the County of Renfrew, if not already accomplished, the Company shall make reasonable efforts to enter into a road users agreement with the County of Renfrew.

E3. If a Road Users Agreement has not been signed with the County of Renfrew within three (3) months of having provided the traffic management plan or updated traffic management plan to the County of Renfrew, the Company shall provide a written explanation to the District Manager as to why this has not occurred.

F - INDIGENOUS CONSULTATION

F1. During the construction, installation, operation, use and retiring of the Facility, the Company shall: (1) create and maintain written records of any communications with Indigenous communities; and (2) make the written records available for review by the Ministry upon request.

F2. The Company shall provide the following to the Ministry identified Indigenous communities:

(1) updates on key steps in the construction, installation, operation, use and retirement phases of the Facility, including notice of the commencement of construction activities of the Facility as approved by this Approval and any future Amendments at the Facility.

F3. If an Indigenous community requests a meeting to obtain information relating to the construction, installation, operation, use and retiring of the Facility, the Company shall make reasonable efforts to arrange and participate in such a meeting.

F4. The Company shall invite members of Indigenous communities to participate in any further archaeological fieldwork.

F5. If any archaeological resources are found during the construction of the Facility, the Company shall:

(1) notify any Indigenous community considered likely to be interested or which has expressed an interest in such finds; and

(2) if a meeting is requested by an Indigenous community to discuss the archaeological find(s), make reasonable efforts to arrange and participate in such a meeting.

G - AIR

Operation and Maintenance

G1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:

(1) prepare, before commencement of operation of the Equipment, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:

- (a.) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers ;
- (b.) emergency procedures, including spill clean-up procedures ;
- (c.) procedures for any record keeping activities relating to operation and maintenance of the Equipment ;
- (d.) all appropriate measures to minimize noise and odorous emissions from all potential sources;
- (e.) procedures for monitoring hydrogen sulphide emissions from the headspace air of the roof membrane system for the Anaerobic Digester ;
- (f.) procedures for monitoring the performance of the Biogas-CHP Treatment System for conditioning the biogas to be used for the operation of the CHP engine set; and
- (g.) the frequency of the inspection and replacement of the media(s) in the Biogas-CHP Treatment System .

(2) implement the recommendations of the Manual.

G2. The Company shall ensure that the activated carbon in the Equipment is replaced before it is Exhausted.

Flare

G3. The Company shall ensure that the Flare system is designed to and operated to comply, at all times, with a destruction efficiency of at least 98%.

G4. The Company shall maintain the Flare system, so that the instance of the CHP unit is not burning Biogas, the flare may be utilized to burn the Biogas produced.

Odour Management Plan

G5. The Company shall, at all times, take all reasonable measures to minimize odorous emissions and odour impacts from all potential sources at the Facility.

G6. The Company shall maintain an Odour Management Plan that includes measures in place and proposed, to minimize odour impacts of the Facility on nearby receptors (not including the sludge generated and other activities from the on-site municipal wastewater treatment plant).

G7. The Odour Management Plan shall include:

- (1) Facility and process descriptions including a list of all potential sources of odour;
- (2) best management practices described in the Ministry's Best Management Practices for Industrial Sources of Odour to ensure the effective implementation of the odour impact reduction measures, including:

- i. periodic preventative activities and their frequency;
- ii. inspection and maintenance procedures;
- iii. monitoring initiatives; and
- iv. record keeping practices for odour complaints and steps taken to address each complaint.

G8. The Company shall:

- (1) update and revise the Odour Management Plan within three (3) months of the implementation of any proposed modifications that may impact odour emissions;
- (2) review and evaluate once every twelve (12) months from the date of the Approval, or at a frequency directed or agreed to in writing by the District Manager, the Odour Management Plan for the control of odour emissions;
- (3) record the results of each annual review and evaluation, and update the Odour Management Plan accordingly;
- (4) maintain the updated Odour Management Plan at the Facility and make it available to the Ministry upon request; and implement, at all times, the most recent version of the Odour Management Plan within sixty (60) days of an update.

G9. The Company shall record, and retain such records, each time a specific preventative and odour impact reduction measure described in the Odour Management Plan is implemented.

Desulphurization System Monitoring

G10. The Company shall install, conduct and maintain a program to monitor and record the operational parameters of the Desulphurization System.

G11. The Company shall monitor and record the operational parameters of the Desulphurization System, either as specified in the Manual of the Desulphurization System manufacturer, or as deemed necessary in accordance with site operational conditions, as follows:

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

H - NOISE PERFORMANCE LIMITS

H1. The Company shall:

- (1) at all times, ensure that the noise emissions from the Facility comply with the limits set in Ministry Publication NPC-300;
- (2) ensure that the Noise Control Measures outlined in section 5.1.3 of the Acoustic Assessment Report are properly maintained and continue to provide the acoustical

performance outlined in the Acoustic Assessment Report; and
(3) restrict the operation of shipping / receiving trucks to the daytime hours from 7 a.m. to 7 p.m.

I - ORGANIC WASTE MANAGEMENT

General

Build in Accordance

- I1. Except as otherwise provided by this Approval, the Facility shall be designed, developed, built, operated and maintained in accordance with the Application.
I2. The most updated Design and Operations Report shall be retained on-site and made available upon Ministry request.

As-built Drawings

- I3. Within ninety (90) days after the construction of the Facility or any modifications thereof:
(1) 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 or Amendments thereof.
(2) the Company shall prepare a set of as-built drawings certified by a Professional Engineer and showing the design of the Facility as constructed. The drawings shall be kept up-to-date through periodic revisions and shall be retained at the Facility. An amendment to this Approval shall be sought for changes to the as-built drawings requiring approval.

Complaints Response Procedure

- I4. (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 - 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 I4(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, Approved Waste Types, Rates and Storage

Service Area & Waste Types

I5. The Company shall only accept waste generated within the service areas described under condition I6.

I6. The operation of this Facility is limited to receipt and processing of the following types of liquid Organic Waste:

(1) liquid Organic Waste generated from the following IC&I sources within the Province of Ontario:

- (a.) restaurants;
- (b.) food and beverage manufacturing, processing and distribution facilities;
- (c.) grocery stores;
- (d.) pet food manufacturing; and
- (e.) rendering facilities.

(2) pre-processed liquid SSO generated from residential (domestic) curbside collection program(s) operated by or on behalf of a municipality within the Province of Ontario, which has been pre-processed to remove Foreign Matter and generate a liquid slurry, using equipment that minimizes the production of plastics with lengths less than 5 mm.

(3) sewage sludge generated at municipal wastewater treatment plants in the Province

of Ontario and Quebec, which within the context of this Approval means the organic materials resulting from treatment of sewage up-to the anaerobic/aerobic digestion processing step at municipal wastewater treatment plants that only process wastewater similar in character to the residential (domestic) sewage from a household.

(4) Septage generated within the Province of Ontario.

17. The Company shall not accept the following waste types at the Facility:

(1) any waste that is classified as hazardous waste in accordance with Regulation 347;

(2) solid waste;

(3) 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;

(4) any non-hazardous animal carcasses, including deadstock as defined in O. Regulation 105/09: Disposal of Deadstock under the Food Safety and Quality Act, 2001, S.O. 2001, c.20;

(5) dedicated loads of soiled diapers, soiled incontinence products, soiled sanitary products and pet waste from the IC&I sources; and

(6) any liquid IC&I waste that does not meet the definition of the Organic Waste.

18. Waste receipt rates and storage limits at the Facility:

(1) The total amount of Organic Waste approved to be accepted at the Facility shall not exceed 99 tonnes per day (equivalent to 36,135 tonnes per year), subject to the following:

(a) no more than 41.1 tonnes per day of Organic Waste from sources other than the on-site municipal wastewater treatment plant .

(2) The maximum quantity of Organic Waste, Biogas and Digestate to be stored/processed at the Facility at any one time is subject to the following limitations:

(a) 1,990 cubic metres of Organic Waste in the two (2) Digesters (995 cubic metres in each Digester);

(b) 1,100 cubic metres of Biogas in the two (2) Digesters (550 cubic metres in each Digester)

(b) 8,400 cubic metres of Digestate in the two (2) Digestate Storage Tanks (4,200 cubic metres in each Digestate Storage Tank).

(3) No Organic Waste, Biogas or Digestate shall be stored at any part of the Facility other than those identified in Condition 18(2) at any time.

(4) In the event that Organic Waste cannot be processed at the Facility and the Facility is at its approved Organic Waste storage capacity, the Company shall cease accepting additional Organic Waste. Receipt of additional Organic Waste may be resumed once such receipt complies with the Organic Waste storage limits approved in this Approval.

(5) No Incoming Organic Waste storage is approved under this Approval.

(6) No storage of Organic Waste in its transportation vehicle is approved under this Approval.

(7) Any temporary storage of the Clean-Out Material shall be as follows:

(a) the Clean-Out Material shall be kept separate from Digestate; and

(b) the Clean-Out Material shall be stored within the confines of the tank it originated in (limited to either the Anaerobic Digesters or Digestate Storage Tanks), at all times until it is ready for removal off-site.

19. The following waste management activities are approved under this Approval:

(1) receipt of liquid Organic Waste at the Liquid Unloading Station via cam lock connections for transfer into the Digesters;

(2) receipt of sewage sludge from the on-site municipal wastewater treatment plant for transfer into the Digesters;

(3) Anaerobic Digestion of the Organic Waste slurry in the Anaerobic Digesters to generate Digestate and Biogas, with the temporary storage of Biogas in the headspace of the Digesters;

(4) Transfer of the Digestate from the Digesters to the Digestate Storage Tanks for temporary storage;

(5) loading of Digestate into enclosed tanker trucks at the Digestate Loading Station via cam lock connections for shipment from the Facility;

(6) transfer of the Biogas from the Digesters to the Biogas-CHP Treatment System for use in the Combined Heat and Power engine to generate heat and electricity;

(7) flaring of the Biogas; and

(8) temporary storage of spent activated carbon within a covered, leak-proof bin prior to its transfer off-site in accordance with Reg. 347 and the Act.

Signs

110. Prior to the receipt of Organic Waste at the Facility (not including the sludge generated from the on-site municipal wastewater treatment plant), the Company shall ensure that a sign is 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:

(1) name of the Company;

(2) this Approval number;

(3) hours during which the Facility is open;

(4) Organic Waste types that are approved to be accepted at the Facility;

- (5) Company's telephone number (a hotline) to which complaints may be directed;
- (6) Company's twenty-four hour emergency telephone number (if different from above);
- (7) a warning against unauthorized access; and
- (8) a warning against dumping at the Facility.

I11. 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.

I12. The Company shall install and maintain appropriate and visible signs at the Facility to direct vehicles to the Organic Waste receiving area and the Digestate removal area.

Facility Security

I13. The Company shall ensure that all waste loading, unloading and transfer to or from vehicles/containers at the Facility are supervised at all times by Trained Personnel.

I14. 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.

I15. The Company shall ensure the Facility is operated in a safe and secure manner, and that all waste is properly handled, packaged or contained and stored so as not to pose any threat to the general public and the Facility personnel.

Facility Operations

I16. The Facility is approved to receive waste generated off-site Monday to Friday from 7:00 am to 7:00 pm, and operate 24 hours per day, 7 days per week, 365 days a year.

I17. No sorting, source separating or unpacking of the Organic Waste shall be conducted at the Facility.

I18. Incoming Organic Waste receipt:

(1) 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.

(2) The Incoming Organic Waste that has not been characterized in accordance with this Approval or that is not accompanied by the required documentation shall not be accepted at the Facility and shall immediately be directed off-site.

(3) The Company shall establish and implement a waste screening and tracking system for all waste received, processed, stored at and transferred from the Facility.

I19. Rejected Waste handling:

(1) In the event that waste that is not approved under this Approval is inadvertently accepted at the Facility, the Company shall ensure that the Rejected Waste is returned in the same truck in which it arrived at the Facility.

(2) In the event that a load of liquid Organic 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 the Digester(s), the content of the Digester(s) shall be considered the Rejected Waste and the Company shall ensure that this Rejected Waste is handled and removed from the Facility in accordance with the contingency measures as required in Condition L1 of this Approval.

(3) Rejected Waste shall be removed from the Facility and disposed of in accordance with Regulation 347, the EPA and the OWRA.

(4) District Manager shall be notified in writing of the receipt of the Rejected Waste within three (3) business days. The following information shall be included in the notification to the District Manager:

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

Tanks

I20. The Company shall ensure that sufficient storage capacity is available in the storage/processing tanks prior to loading of the tanks.

I21. The Company shall,

- (1) install, operate and maintain **all** waste storage and processing tanks with a liquid level monitoring devices;
- (2) 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
- (3) install, operate and maintain a high-level auditory 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

I22. Except for the Anaerobic Digesters and Digestate Storage Tanks, 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.

I23. (1) The Phase 0 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 2484 cubic metres, per the Secondary Containment Design Report as set out in the application.

(2) The most updated Secondary Containment Design Report shall be retained on-site

and made available upon Ministry request at all times.

I24. The outdoor loading and unloading areas for the transfer of liquids into and from the storage tanks shall be constructed such that any spills during loading/unloading would be collected and contained on-site, as set out in the Application.

I25. The Company shall ensure that a drip tray is placed under the cam-lock connection when the liquids are being unloaded from or loaded into the tanker trucks.

Anaerobic Digestion

I26. Each Digester shall be mechanically mixed, insulated, heated and covered with a double membrane cover with a permeability of less than $500 \text{ cm}^3 / \text{m}^2 / \text{bar/day}$.

I27. 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.

I28. The Company shall provide a minimum hydraulic retention time of twenty (20) days for the Organic Waste in each Anaerobic Digester at all times during normal Anaerobic Digestion operations.

I29. The Company shall operate each Anaerobic Digester with a maximum organic loading rate of less than 3.5 kg of volatile solids per cubic metre per day at all times during normal Anaerobic Digestion operations.

I30. The hydraulic retention time, liquid level and temperature of the Organic Waste in the Anaerobic Digesters shall be monitored on a continuous basis and recorded to verify compliance with Conditions I27 and I28.

I31. The Company shall sample and analyse the waste in the Anaerobic Digesters for pH, alkalinity, volatile fatty acids, ammonia, and volatile solids reduction percentage (inlet vs outlet of the digesters) on a quarterly basis.

I32. The Biogas in the headspace of each Anaerobic Digester shall be contained and exhausted into the Biogas-CHP Treatment System, boiler and/or the Flare, at all times.

I33. The Company shall electronically monitor the pressure within the Anaerobic Digesters 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 valves to the atmosphere, regardless of quantity, the Company shall immediately notify the Ministry, in writing.

I34. 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.

I35. The Digesters shall be equipped with:

(1) sampling ports or other means by which a sample can be taken that represents the Organic Waste entering the Digesters, to allow for collection of samples of the Organic Waste for the testing required under this Approval; and

(2) sampling ports or other means by which a sample can be taken that represents the contents of the Digesters before the Digestate from the Digesters enters into the Digestate Storage Tanks, to allow for collection of samples of the Digestate for the testing required under this Approval.

I36. The Digestate Storage Tanks shall be equipped with sampling ports or other means by which a sample can be taken that represents the contents of the Digestate Storage Tanks, to allow for collection of samples of the Digestate for the testing

required under this Approval.

Liquid Digestate Handling

I37. Prior to receiving Organic Waste at the Facility at a receipt rate that exceeds 70 tonnes per day, the Company shall obtain and maintain agreements for the transfer and storage of the Digestate off-site that provides for an additional approximately 2,324 cubic metres of Digestate storage (approximately 52 days of storage time), which are signed by the owners of the off-site NASM storage locations and include the owner's total NASM storage volume that is constructed, approved, readily-available and designated for the Facility's Digestate. Copies of the agreements shall be maintained at the Facility for inspection purposes at all times.

I38. The Digestate shall be loaded into the transfer vehicles via a cam lock at the Digestate Loading Station.

Wastewater Management

I39. The Company shall ensure that all wastewater, including:

- (1) spills/stormwater collected within the sumps at the Liquid Unloading Station/Digestate Loading Station and the concrete pad housing the Biogas treatment and utilization Pad;
 - (2) supernatant removed from the Digestate Storage Tanks, and
 - (3) all condensate that is generated in the Biogas condensate trap, Biogas-CHP Treatment system and boiler,
- is contained within the leak-proof collection systems for immediate discharge into the headworks of the on-site municipal wastewater treatment plant via gravity pipes and/or forcemains, at all times.

I40. The Company shall conduct monthly inspections of all sumps (i.e., the sumps located at the Liquid Unloading Station/Digestate Loading Station and the Biogas treatment and utilization pad), and empty, clean and disinfect as necessary to ensure they are functioning as intended.

I41. The Company shall ensure that the sump(s) within the Liquid Unloading Station/Digestate Loading Station are emptied prior to the unloading and loading of any waste, respectively.

142 . In the event that the effluent limits of the Petawawa Water Pollution Control Plant are exceeded as a result of the operations covered under this Approval, the Company shall:

- a. immediately notify the District Manager;
- b. reduce and/or cease the receipt of Organic Waste at the Facility, as needed;
- c. determine the corrective actions needed to allow for the Petawawa

Water Pollution Control Plant's effluent limits to be met at the maximum Organic Waste receipt rates set out in this Approval; and

- d. prior to implementing the corrective actions, submit the proposed corrective actions to the District Manager for written concurrence, including the need for any amendments to this Approval that are required to allow for the receipt of Organic Waste at the maximum rates set out in this Approval.

Stormwater Management

I43. The Company shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections once every two (2) weeks and after each significant storm event (a significant storm event is defined as a minimum of 25 mm of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control measures shall continue until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly. Additionally, the Company shall:

- (1) Employ best management practices for stormwater management and sediment and erosion control during construction, installation, use, operation, maintenance and retiring of the Facility;
- (2) Implement an environmental effects monitoring plan in accordance with Table 7-1 of the Design and Operations Report;
- (3) Notify the District Manager in writing within 30 days if:

- a. the environmental effects monitoring plan outlined in Table 7-1 of the Design and Operations Report indicates a persistent problem that the monitoring and contingency measures outlined therein are not able to address, to discuss appropriate mitigative measures; or
- b. there is an off-site Adverse Effect caused by stormwater discharging from the Facility.

- (4) Maintain records of inspections and maintenance which shall be made available for inspection by the Ministry, upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures, if any, undertaken to maintain the temporary sediment and erosion control measures.

Groundwater Management

I44. The Company shall implement and maintain the groundwater monitoring program for the anaerobic digestion facility for the purposes of establishing baseline

groundwater quality and hydrogeological conditions, detecting potential releases from the anaerobic digesters and digestate storage tanks to the subsurface environment; and assessing whether facility operations are causing adverse effects on groundwater quality.

Monitoring Network

(1) The Company shall maintain a groundwater monitoring network consisting of:

- a. monitoring wells MW101-21, MW103-21, and MW108-21; and
- a. one replacement downgradient monitoring well to replace monitoring well MW102-21. The replacement monitoring well shall be located downgradient of the digestate storage tanks within the interpreted groundwater flow path as shown in Figure 2 of the Groundwater Monitoring Plan.

Initial Baseline Monitoring

(2) For twelve (12) months following the issuance of this Approval, the Company shall:

- a. measure groundwater elevations in all monitoring wells at least once every three (3) months;
- b. collect groundwater samples from all monitoring wells at least once every three (3) months; and
- c. establish baseline groundwater elevation, groundwater flow direction, and groundwater quality conditions.

Water Level Monitoring

(3) The Company shall:

- a. measure static groundwater levels in each monitoring well during every monitoring event;
- b. install and maintain a pressure transducer data logger in a downgradient monitoring well;
- c. install and maintain a barometric logger for atmospheric pressure compensation; and
- d. collect continuous groundwater level and temperature data using the datalogger at a minimum frequency of two measurements per day.

Well Purging and Field Measurements

(4) Prior to groundwater sample collection, the Company shall:

- a. measure static water levels; and
- b. purge a minimum of three well volumes or until purge water is observed to be representative of formation water based on clear water and the stabilization of the following field parameters:

- i. pH,
- ii. temperature,
- iii. electrical conductivity,
- iv. dissolved oxygen, and
- v. oxidation-reduction potential

Analytical Parameters

(5) Groundwater samples collected from each monitoring well shall be analyzed by a CALA (Canadian Association for Laboratory Accreditation) -accredited laboratory for the following parameters:

- a. pH;
- b. alkalinity;
- c. chloride;
- d. potassium;
- e. total dissolved solids;
- f. dissolved metals;
- g. total organic carbon;
- h. total dissolved phosphorus;
- i. total coliforms;
- j. *Escherichia coli* ;
- k. total ammonia nitrogen;
- l. total Kjeldahl nitrogen;
- m. nitrate;
- n. nitrite;
- o. chemical oxygen demand;
- p. biological oxygen demand; and
- q. dissolved methane.

Quality Assurance and Quality Control

(6) The Company shall ensure that:

- a. groundwater samples are preserved and transported in accordance with laboratory requirements;
- b. samples are maintained between 0°C and 10°C during storage and transport;
- c. chain-of-custody procedures are followed for all samples; and
- d. field duplicate samples are collected at a minimum frequency of one duplicate per ten samples collected.

Ongoing Monitoring

(7) Following completion of the initial baseline monitoring period (first 12 months), the Company shall:

- a. continue groundwater monitoring for the life of the facility;
- b. measure groundwater elevations and collect groundwater quality samples from all monitoring wells no less than twice annually, during the spring and autumn periods; and
- c. maintain continuous operation of the groundwater level data logger.

Data Review and Trend Assessment

(8) The Company shall ensure that ground water monitoring results are reviewed following each monitoring event and evaluate the results for:

- a. exceedances of applicable Provincial Water Quality Objectives (PWQOs) and/or applicable O. Reg. 153/04 groundwater standards;
- b. statistically significant increasing trends (trend analyses shall utilize Mann-Kendall or Seasonal Kendall statistical methods, as appropriate); and
- c. abrupt changes indicative of a release from the facility.

Trigger Levels

(9) The Company shall initiate an investigation where:

- a. a parameter that did not exceed an applicable groundwater criterion during the baseline monitoring period subsequently exceeds that criterion;
- b. a parameter is less than the groundwater criterion but exceeds three (3) times the maximum baseline concentration where the reported concentration is greater than five (5) times the laboratory reporting limit;
- c. a parameter is less than the applicable groundwater criterion but exceeds five (5) times the maximum baseline concentration where the reported concentration is less than five (5) times the laboratory reporting limit; and / or
- d. an increasing trend is identified and if over three consecutive monitoring events the following is observed:
 - i. a laboratory parameter exceeds three (3) times the maximum baseline concentration; and / or
 - ii. a field parameter exceeds the maximum baseline value by more than ten percent (10%).

Response Actions

(10) Upon identification of a trigger described in Condition I44(9) the Company shall:

- a. notify the District Manager in writing within seven (7) days;
- b. promptly re-sample affected monitoring wells to confirm the result;
- c. inspect the anaerobic digestion facility, digestate storage tanks, and associated infrastructure for evidence of leakage; and
- d. document all findings and corrective actions taken.

Enhanced Monitoring

(11) Where a trigger event is confirmed, the Company shall:

- a. increase groundwater monitoring frequency to quarterly;
- b. continue enhanced monitoring until the source of the impact is identified and addresses;
- c. undertake additional investigation as necessary, including supplemental groundwater quality analyses, installation of additional monitoring wells, or detailed hydrogeological assessment; and
- d. notify the District Manager in writing describing the findings, corrective actions, and status of groundwater conditions.

Documentation

(12) The Company shall document and retain a brief annual groundwater monitoring report that includes:

- a. groundwater elevation data;
- b. analytical results and laboratory certificates;
- c. identification of any exceedances, trigger events, or adverse trends;
- d. a summary of investigations and corrective actions undertaken; and recommendations for modifications to the monitoring program, if required.

The report shall be made available to the Ministry upon request.

Biogas Management

I45. The Company shall maintain the Flare system so that in the instance of a process upset, excessive Biogas production, and/or when the Biogas-CHP Treatment System is inoperable or producing Biogas that is out of compliance with the required quality criteria, the Flare may be utilized to combust the Biogas.

Prohibitions

I46. Burning of any wastes, other than the Biogas, as approved in this Approval, is prohibited at the Facility.

I47. Truck washing is prohibited at the Facility.

I48. There shall be no public access to the Facility for waste drop off.

Facility Inspection and Maintenance

I49. The Company shall maintain a comprehensive written inspection program which

includes inspections of all aspects of the Facility's operations including, as a minimum, the following:

- (1) all waste loading, unloading, storage, handling and processing areas;
- (2) condition of all major pieces of the equipment;
- (3) condition of all instruments for monitoring required under this Approval;
- (4) security fence and property line;
- (5) presence of excessive fugitive dust emissions from the operation of the Facility;
- (6) presence of leaks and drips; and
- (7) presence of off-site odours.

I50. 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.

I51. The Company shall ensure that the required Facility inspections are undertaken daily from Monday to Friday (not including statutory holidays) 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.

I52. 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.

I53. The Company shall ensure that the critical spare parts are available at the Facility at all times or be immediately available from an off-site supplier.

I54. 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.

I55. The preventative maintenance program referred to in Condition I54 shall be maintained up-to-date, be retained at the Facility and be available for inspection by a Provincial Officer, upon request.

I56. When the waste storage and processing tanks/areas are cleaned out, the tanks/areas shall be internally inspected to ensure the integrity of it's structure.

Organic Waste Quality Criteria / Testing / Monitoring

I57. (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, Digestate and Clean-Out Materials shall be performed in accordance with the Sampling and Analysis Protocol and by:

- (a) a laboratory that is accredited by the Ministry of Agriculture, Food and Rural Affairs for that purpose; or
- (b) a laboratory that is accredited in accordance with the International Standard ISO/IEC 17025 - General Requirement for the Competence of Testing and Calibration Laboratories, dated December 15, 1999, as amended from time to time.

Incoming Organic Waste Quality Criteria and Testing

(3) The Company shall ensure that the Incoming Organic Waste from each source complies with the following:

- (a) the maximum metal concentrations set out in column 2 or 3, as applicable, of Table 2 of Schedule 5 of O. Reg. 267/03;
- (b) Foreign Matter content shall not exceed 2% calculated on a dry weight basis;
- (c) plastic content shall not exceed 0.5% calculated on a dry weight basis;
- (d) there shall not be any particles of any waste that will not pass through a screen whose largest opening has an area of 2.5 square centimetres; and
- (e) any off-site pre-processing shall be designed and operated to minimize the production of plastics with lengths of less than 5 millimetres.

(4) For metals, plastics and particle size:

- (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, Foreign Matter content, plastic content, and particles of any material that will not pass through a screen whose largest opening has an area of 2.5 square centimetres during the 14-day 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's Foreign Matter metal, plastic and particle size 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, Foreign Matter, plastic and particle size quality criteria from this Approval, the Company shall collect samples 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 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
- (ii) following the initial characterization of the Incoming Organic Waste, one (1) composite sample every 1,000 m³ of the given Organic Waste or once a year, whichever comes first, provided the said Organic Waste is of the same type and is from the same source. If, after the first twelve (12) months of sampling and analysis, the results are consistent and continuously below the prescribed limits, 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.

(d) The Company shall ensure that each sample of the Incoming Organic Waste has been analysed for Foreign Matter content

(dry weight basis), plastic content (dry weight basis), particles of any material that will not pass through a screen whose largest opening has an area of 2.5 square centimetres, and 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 particle size, metals, Foreign Matter content and plastic content limits set out in Condition I57(3).

(f) Should results of testing of the Incoming Organic Waste fail to meet the quality criteria specified in this Approval for particle size, metals, Foreign Matter content and plastic content, 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 particle size, Foreign Matter content, plastic content, and/or metal content in the said Organic Waste exceeds the limits set out in Condition I57(3).

Digestate and Clean-Out Material Quality Criteria and Testing

(6) If the Digestate is managed as a material destined for land application on

agricultural land, 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 1 or 2, as applicable, of Schedule 5 of O. Reg. 267/03; and
- (b) pathogens shall not exceed the maximum pathogen levels set out in Table 3 of Schedule 6 of O. Reg. 267/03 for CP2 NASM.

(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 I57(6) of this Approval.

(8) If the Digestate is managed as a NASM destined for land application on agricultural land, the Company shall:

- (a) collect one (1) sample per month from each Digestate Storage Tank, and analyze the samples for metals listed in Table 2 of Schedule 5 of O. Reg. 267/03; and
- (b) collect one (1) sample at a minimum of every two weeks from each Digestate Storage Tank, and analyze each of the samples for E.coli.

(9) If the results required by Condition I57(9)(b.) for twelve (12) consecutive sampling events are all less than the maximum pathogen levels set out in Table 3 of Schedule 6 of O. Reg. 267/03 for CP2 NASM within the preceding period of no less than three (3) months (i.e., six months of biweekly sampling or three months of weekly sampling), then the Digestate sampling frequency set out under Condition I57(8)(b.) can be reduced to once per month.

(10) 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 I57(8), and I57(9).

(11) If the Clean-Out Material is managed as a material destined for land application on agricultural land, the Clean-Out Material 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 1 or 2, as applicable, of Schedule 5 of O. Reg. 267/03;
- (b) pathogens shall not exceed the maximum pathogen levels set out in Table 3 of Schedule 6 of O. Reg. 267/03 for CP2 NASM;
- (c.) Foreign Matter content shall not exceed 2% calculated on a dry weight basis;
- (d.) plastic content 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.

(12) If the Clean-Out Material is managed as a waste destined for land application on non-agricultural land:

- (a) the Clean-Out Material shall meet the quality criteria required by the conditions of the Environmental Compliance Approval for the site where it is to be land-applied; or
- (b) in the absence of specific quality criteria requirements in the Environmental Compliance Approval for the site where the Clean-Out Material is to be land-applied, it shall meet the requirements set out in Condition I57(11) of this Approval.

(13) If the Clean-Out Material is managed as a NASM destined for land application on agricultural land, the Company shall collect one (1) sample from each batch of Clean-

Out Material, and analyze the samples for *E. coli*, Foreign Matter, plastics, particles of any material that will not pass through a screen whose largest opening has an area of 2.5 square centimetres and the metals listed in Table 2 of Schedule 5 of O. Reg. 267/03.

(14) If the Clean-Out Material 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 Clean-Out Material 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 Clean-Out Material is to be land-applied, the Company shall undertake quality control sampling and testing required by Condition I57(13).

End Use of Digestate and Clean-Out Material

I58. (1) If the Digestate or Clean-Out Material is to be land-applied to agricultural land, the Digestate or Clean-Out Material shall be managed in accordance with the requirements of the NMA for CP2 NASM.

(2) If the Digestate or Clean-Out Material is not managed in accordance with the requirements of the NMA, it is considered a Processed Organic Waste, and it shall be managed as follows:

- (a) Digestate or Clean-Out Material 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 or Clean-Out Material 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 or Clean-Out Material 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.

Trucks and Traffic

I59. (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's ministry 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 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.
- (3) The Company shall ensure that the vehicles transporting waste to and from the Facility use the designated on-site traffic routes.
- (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 on-site roads and operations/yard areas are swept/wetted to prevent dust impacts off-site on an as-needed basis.
- (7) The Company shall ensure that all vehicles hauling solid waste are adequately covered to prevent fugitive odour or dust emissions during transport.

Vectors, Vermin and Wildlife

- (8) 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.

Gas Monitoring

- (9) The Company shall install and maintain monitors and audible/visual alarms for explosive methane concentrations and hazardous hydrogen sulfide concentrations within the CHP enclosure, digester gallery and boiler building, with immediate corrective actions should any alarm be triggered.

J - OPERATIONS MANUAL

- J1. The Company shall maintain and implement an Operations Manual for use by the Facility personnel. As a minimum, the Operations Manual shall contain the following:
- (1) outline the responsibilities of the Facility personnel;
 - (2) personnel training protocols;
 - (3) waste receiving procedures;
 - (4) waste unloading, handling and storage procedures;
 - (5) waste processing and monitoring procedures;
 - (6) sampling and testing procedures;
 - (7) Facility inspections, fire, spill, upset, and leakage recording procedures;
 - (8) emergency response procedures;
 - (9) procedures for handling complaints as described in this Approval;
 - (10) routine operating and maintenance procedures in accordance with good engineering practices for stormwater management and groundwater monitoring and as recommended by the Equipment manufacturers;
 - (11) the frequency of the replacement of the activated carbon in the Activated Carbon

Adsorption Units;

(12) procedures for monitoring the performance of the Activated Carbon Adsorption Units; and

(13) all appropriate measures to minimize odour, dust and noise emissions from all potential sources at the Facility.

J2. The Company shall:

(1) keep a copy of the operations manual at the Facility and accessible to Facility personnel at all times;

(2) update the operations manual as required; and

(3) make the operations manual available for review by the Ministry upon request.

K - STAFF TRAINING

K1. All operators of the Facility shall be trained with respect to the following:

(1) terms, conditions and requirements of this Approval;

(2) 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;

(3) an outline of the responsibilities of Facility personnel including roles and responsibilities during emergency situations;

(4) the Emergency Response and Contingency Plan including exit locations and evacuation routing, and location of relevant equipment available for emergency situations;

(5) environmental and occupational health and safety concerns pertaining to the process and wastes to be handled at the Facility;

(6) emergency first-aid information;

(7) relevant air, noise, wastewater and waste management legislation, regulations, and guidelines, including the Act and Reg. 347;

(8) record keeping and retention procedures, as required by this Approval;

(9) Facility inspection and maintenance procedures, as required by this Approval;

(10) nuisance impact control and housekeeping procedures, as required by this Approval;

(11) procedures for recording and responding to public complaints;

(12) specific written procedures for the control of Adverse Effects from the Facility; and

(13) specific written procedures for refusal of unacceptable incoming waste loads.

K2. The training of the operators of the Facility shall also include the procedures contained in the Operations Manual.

K3. The training of the operators of the Facility shall be undertaken:

(1) upon commencing employment at the Facility;

(2) whenever procedures are updated or during the planned three (3)-year refresher training.

L - EMERGENCY RESPONSE AND CONTINGENCY PLAN

L1. The Company shall maintain an Emergency Response and Contingency Plan. The Emergency Response and Contingency Plan shall be prepared in consultation with the District Manager, the local municipality, and the local fire department, and as a minimum, shall include the following information and items described:

- (1) emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire, or any other emergency situation, including specific clean up methods for wastes expected to be generated from the emergency situation;
- (2) odour abatement plan to propose the design and operation of the contingency measures necessary to alleviate impacts from odours emitted from the Facility;
- (3) dust abatement plan to propose the design and operation of the contingency measures to alleviate impacts from dust originating from the waste management and vehicular activities at the Facility;
- (4) trigger mechanism for implementation of the abatement plans required by (2) and (3), above;
- (5) a list of equipment and clean up materials available for dealing with the emergency situations;
- (6) 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 Ontario Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response;
- (7) 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;
- (8) procedures and actions to be taken should the Digestate fail to meet the requirements under the NMA;
- (9) 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; and
- (10) a spill contingency plan - that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the Works. This plan shall be implemented for all the identified containment areas and include as a minimum:

- a. the name, job title and location (address) of the Company, person in charge, management or person(s) in control of the facility;
- b. the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill contingency plan;
- c. a site plan drawn to scale showing the facility, nearby

buildings, streets, catch-basins and manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);

- d. steps to be taken to report, contain, clean up and dispose of contaminants following a spill;
- e. a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and Ministry Spills Action Centre 1-800-268-6060;
- f. Safety Data Sheets (SDS) for each hazardous material which may be transported or stored within the area serviced by the Works;
- g. the means (internal corporate procedures) by which the spill contingency plan is activated;
- h. a description of the spill response training provided to employees assigned to work in the area serviced by the Works, the date(s) on which the training was provided and by whom;
- i. an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and
- j. the date on which the contingency plan was prepared and subsequently, amended.

L2. 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.

L3. 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.

L4. 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.

M - EMERGENCY SITUATIONS RESPONSE AND REPORTING

M1. 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.

M2. 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.

M3. 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.

M4. 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.

N - RECORD KEEPING AND RETENTION

Daily Activities

N1. The Company shall establish and 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 record shall include, as a minimum, the following:

- (1) date of record;
- (2) details on the quantity and type of the Organic Waste received at the Facility, including the Incoming Organic Waste characterization results, or published characterization data, as applicable;
- (3) amount of the Digestate shipped from the Facility, its categorization and destination (include the receiving site's Environmental Compliance Approval number if applicable) ;
- (4) quantity and type of waste processed at the Facility;
- (5) quantity and type of waste present at the Facility, including the Organic Waste in-storage and in-process;
- (6) quantity and type of any Rejected Waste and Residual Waste removed from the Facility;
- (7) process monitoring results;
- (8) housekeeping activities, including litter collection, washing/cleaning activities, etc. ;
- (9) date and the quantity of Biogas generated at the Facility;
- (10) date and duration of the Flare being used for Biogas flaring.
- (11) all records on the maintenance, repair and inspection of the Equipment; and
- (12) all records on the monitoring activities of the Activated Carbon Adsorption Units as required by this Approval.

N2. The Company shall retain all records retaining to waste characterization required by this Approval for a minimum of five (5) years.

Emergency Situations

N3. The Company shall establish and maintain an on-site written or digital record of emergency situations. The record shall include, as a minimum, the following:

- (1) the type of emergency situation;
- (2) description of how the emergency situation was handled;
- (3) the type and amount of material spilled, if applicable;
- (4) a description of how the material was cleaned up and stored, if generated; and
- (5) the location and time of Final Disposal, if applicable.

Inspections

N4. The Company shall establish and maintain an on-site written or digital record of inspections as required by this Approval. The record shall include, as a minimum, the following:

- (1) the name and signature of the person that conducted the inspection;
- (2) the date and time of the inspection;
- (3) the list of any deficiencies discovered;
- (4) the recommendations for remedial action; and
- (5) the date, time and description of actions taken.

Training

N5. The Company shall establish and maintain an on-site written or digital record of training as required by this Approval. The record shall include, as a minimum, the following:

- (1) date of training;
- (2) name and signature of person who has been trained; and
- (3) description of the training provided.

Sampling and Testing Records

N6. 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:

- (1) waste sampled, sample collection locations and volume collected;
- (2) day and time of collection;
- (3) sample handling procedures;
- (4) parameters tested for and the resulting concentrations;
- (5) name of the laboratory facility conducting the testing; and
- (6) conclusions drawn with respect to the results of the sampling and testing.

Monitoring Records

N7. 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

N8. The Company shall establish and maintain a written or digital record of complaints received and the responses made as required by this Approval.

Annual Report

N9. By March 31st following the end of each operating year, the Company shall prepare and submit to the District Manager an annual report summarizing the operation of the Facility covering the previous calendar year. The annual report shall include, as

a minimum, the following information:

- (1) a monthly summary of the quality and the quantity of all Organic Waste received, all outgoing Digestate, Residual Waste and Rejected Waste, including analytical data required to characterize the waste;
- (2) material balance for each month documenting the amount of Organic Waste stored at the Facility;
- (3) a monthly summary of the quality and the quantity of the Digestate pumped to the Digestate Storage Tanks;
- (4) a monthly summary of the quality and the quantity of the Digestate shipped from the Facility and its end-use designation (ie. CP2 NASM or Processed Organic Waste) and its final end-use destination (ie. agricultural or non-agricultural location) and address;
- (5) annual amount of Biogas produced at the Facility;
- (6) annual duration of the Flare being used for Biogas flaring;
- (7) a summary of implemented commitments from the Environmental Impact Study report ;
- (8) 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;
- (9) any recommendations to minimize environmental impacts from the operation of the Facility and to improve Facility operation and monitoring programs in this regard;
- (10) a summary of any complaints received and the responses made;
- (11) 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;
- (12) a summary of all inspections and maintenance carried out at the Facility;
- (13) a written statement that the Facility was in compliance with the Approval; and
- (14) any other information the District Manager requires from time to time.

SCHEDULE "A" Facility Description

The Facility shall consist of:

- a Class 3 anaerobic digestion facility, to process a maximum of 36,135 tonnes of liquid Organic Waste per year to generate 200 kilowatts of electricity (kW_{el}) and consisting of the following processes, working areas and supporting units:

- one (1) outdoor Liquid Unloading Station and

Digestate Loading Station consisting of two (2) cam lock connections (one for unloading of the Incoming Organic Waste and one for the unloading of the outgoing Digestate), and a 5 m x 7 m impermeable concrete unloading pad with 150 mm curbing along the length of the pad and a 2% slope towards a sump for the collection of any spills during unloading/loading, discharging any collected spills and stormwater to the headworks of the on-site municipal wastewater treatment plant via a pump and forcemain;

- two (2) partially below-ground primary concrete Anaerobic Digesters with a double-membrane 1/2 dome roof with a maximum permeability of 500 cm^3 of methane/ $\text{m}^2/\text{bar}/\text{day}$, each having a liquid Organic Waste working capacity of 995 m^3 and a Biogas working capacity of 550 m^3 , equipped with insulation, an anti-corrosive liner in the headspace, a waterproof liner, over and under pressure relief devices (including a secondary over pressure relief device), pressure sensor(s), heat-exchanger with recirculation and hot water pumps, mixers, blowers, a level sensor, temperature sensor(s), a chemical dosing system for dosing nutrients/anti-foamers/pH/ferric chloride, and low-level and high-level alarms;
- two (2) partially below-ground glass-lined-steel Digestate Storage Tanks, each with a working volume of $4,200 \text{ m}^3$, equipped with an open hatch for under/over pressure relief, pressure sensor(s), three (3) sludge mixing and transfer pumps, and supernatant withdrawal equipment, discharging supernatant to the headworks of the on-site municipal wastewater treatment plant and liquid Digestate to the Digestate Loading Station

- one (1) Biogas-CHP Treatment System including:
 - one (1) desulphurization system for the desulphurization of the unconditioned biogas prior to directing it to the combined heat and power generator described below, with a rated capacity of 279 normal cubic metres per hour, equipped with 20 cubic metres of packing media, an empty bed residence time of 4 minutes, and an irrigation system comprised of a process liquid recirculation system and spray nozzles;
 - a gas analyzer;
 - an oxygen injection system;
 - one (1) biogas conditioning system, having a rated capacity of 112 normal cubic metres per hour, consisting of a preliminary knock out tank, inlet blower, chiller, heat exchangers, secondary knock out tank, and activated carbon tank, equipped with 450 kilograms of activated carbon media, for the removal of moisture, siloxanes and other impurities from the unconditioned biogas;
 - one (1) combined heat and power generator having a generating output capacity of 200 kilowatts of electricity (kWe) and a maximum conditioned biogas firing rate of 112 normal cubic metres per hour, discharging to the air at a maximum volumetric flow rate of 0.23 cubic metre per second through a stack having an exit diameter of 0.15 metre, extending 6.5 metres above grade;
 - one (1) Flare to combust biogas at a

maximum biogas firing rate of 279 normal cubic metres per hour, discharging through a stack having an exit diameter of 0.5 metre, extending 5 metres above grade;

- two (2) natural gas or biogas fired boilers, each having a maximum heat input of 1,328,400 kilojoules per hour;
- four (4) groundwater monitoring wells; two (2) located upgradient of the existing Digestate Storage Tanks, and two (2) located downgradient of the existing Digester Tanks;
- stormwater management works to serve the Class 3 anaerobic digestion facility at the Petawawa Water Pollution Control Plant located in the Town of Petawawa, for the collection, transmission, treatment and disposal of stormwater runoff from a total catchment area of 1.9 hectares, to provide Basic Level water quality protection and erosion control, discharging to the Ottawa River consisting of the following:
 - grassed drainage swale located along the northern portion of the anaerobic digestion facility at the Petawawa Water Pollution Control Plant (directly north of the proposed stormwater management facility indicated below), discharging to the Ottawa River;
 - grassed drainage swale located along the western, southern, and eastern perimeter of the anaerobic digestion facility at the Petawawa Water Pollution Control Plant, discharging to the proposed stormwater management facility indicated below;

- stormwater management facility (catchment area 1.9 hectares): one (1) geosynthetic clay-lined dry pond, located at the north east corner of the site, east of the secondary treatment facility, having a maximum available storage volume of 3,009 cubic metres and a maximum depth of 1.5 metres, complete with one (1) inlet swale and 610 millimetre diameter storm inlet pipe, and one (1) outlet structure with riprap, consisting of one (1) 600 millimetre diameter storm outlet pipe equipped with a normally closed gate valve, allowing a maximum discharge of 389 litres per second under the 100-year storm event to the Ottawa River;
- including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned stormwater management works;

all in accordance with the application.

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

GENERAL

(1) Conditions A1, A7, A8 and A24 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. These conditions are also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

(2) Conditions A2 and A3 are included to require the Company to provide information to the public and the local municipality.

(3) Conditions A4, A5, A9, A10, A11, A12, A13, A18, A19, and A20 are included to clarify the legal rights and responsibilities of the Company.

(4) Condition A6 is included to require the Company to inform the Ministry of the

commencement of activities related to the construction, installation, and operation of the Facility.

(5) Condition A14 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.

(6) Conditions A15 and A16 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.

(7) Condition A17 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.

(8) Conditions A21, A22, and A24 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.

(9) Condition A23 is to ensure that the stormwater/secondary containment pond is not decommissioned prior to the digestion facility and remains in service to manage any spills that may occur during closure of the waste works.

(10) Condition A25 is to ensure that the construction of the Facility is conducted in accordance with approved phases of the Project.

(11) Condition B is intended to limit the time period of the Approval.

ARCHAEOLOGICAL RESOURCES

(12) Condition C is included to protect archaeological resources that may be found at the project location.

MUNICIPAL CONSULTATION

(13) Condition E is 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.

INDIGENOUS CONSULTATION

(14) Condition D and F is included to ensure continued communication between the Company and interested Indigenous communities.

AIR

(15) Conditions Nos. G1 and G2 are included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the Act, the regulations and this Approval.

(16) Conditions Nos. G3 to G9 are included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the

operation of the Facility and/or Equipment.

(17) Conditions Nos. G10 and G11 are included to require the Company to gather accurate information so that the environmental impact and subsequent compliance with the EPA, the regulations and this Approval can be verified; and to require the Company to gather accurate information on a continuous basis so that the environmental impact and subsequent compliance with the EPA, the regulations and this Approval can be verified.

NOISE PERFORMANCE LIMITS

(18) Condition Nos. H1.(1) and H1.(2) are included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility / Equipment.

(19) Condition No. H1.(3) is included to ensure that the operation of the shipping / receiving trucks is not extended beyond the stated hours to prevent an adverse effect resulting from the operation of the Facility / Equipment.

BUILD IN ACCORDANCE AND AS-BUILT DRAWINGS

(20) Conditions I1, I2, and I3 are included to ensure that the Facility is operated in accordance with the Application and not in a manner which the Director has not been asked to consider.

COMPLAINTS RESPONSE PROCEDURE

(21) Condition I4 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.

SERVICE AREA, APPROVED WASTE TYPES, RATES & STORAGE

(22) Conditions I5, I6, I7, and I8 are included to specify the approved Organic Waste receipt rate and the approved Organic Waste types and the service area from which Organic Waste may be accepted at the Facility based on the Company's Application.

Condition I12 is also included to specify the maximum amount of waste that is approved to be stored at the Facility.

SIGNS

(23) Conditions I10, I11 and I12 are 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.

FACILITY SECURITY

(24) Conditions I13, I14, and I15 are 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.

FACILITY OPERATIONS

(25) Condition I16 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.

(26) Conditions I9, I17, I20, I21, I22, I23, I24, and I25 are included to ensure that waste handling and storage are undertaken in a way which does not result in an Adverse Effect or hazard to the natural environment or any persons.

(27) Condition I18 is included to ensure that only the approved waste types are accepted and processed at the Facility.

(28) Condition I19 is included to specify the requirements for handling of the Rejected Waste that was inadvertently received at the Facility.

(29) Condition I24 is included to specify odour control measures to minimize the potential for odour emissions from the Facility.

(30) Conditions I26 to I48 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.

FACILITY INSPECTION AND MAINTENANCE

(31) Conditions I49 to I56 are 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.

QUALITY CRITERIA / TESTING / MONITORING

(32) Condition I57 is 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.

END USE OF PROCESSED MATERIAL

(33) Conditions I58 are included to ensure that all Digestate is 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.

NUISANCE IMPACT CONTROL AND HOUSEKEEPING

(34) Conditions I59 is included to ensure that the Facility is operated and maintained in an environmentally acceptable manner which does not result in an Adverse Effect or hazard to the natural environment or any persons.

OPERATIONS MANUAL AND TRAINING

(35) Conditions J and K 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.

EMERGENCY RESPONSE AND CONTINGENCY PLAN AND EMERGENCY SITUATIONS RESPONSE AND REPORTING

(36) Condition L is included to ensure that the Company is prepared and properly equipped to take action in the event of an emergency situation.

(37) Condition M is included to require further spill notification to the Ministry, in addition to the requirements already listed in Part X of the Act.

RECORD KEEPING AND RETENTION

(38) Condition N is included to ensure that detailed records of Facility activities, inspections, monitoring and upsets are recorded and maintained for inspection and

information purposes.

This amended Renewable Energy Approval revokes and replaces Approval No. 5211-CM3MB6 issued on April 25, 2023 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 each 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;
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 OLT.Registrar@ontario.ca	and	The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3 minister.mecp@ontario.ca	and	The Director Section 47.5, Environmental Protection Act Ministry of the Environment, Conservation and Parks 40 St. Clair Avenue West 2nd Floor, Toronto, Ontario M4V 1M25 reaprogramdelivery@ontario.ca
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*** 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 <https://ero.ontario.ca/>, 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 26th day of August,
2026

Mohsen Keyvani, P.Eng.
Director
Section 47.5, *Environmental Protection Act*

KD/
c: District Manager, MECP Ottawa
Trevor Woodtke, The Corporation of the Town of Petawawa