

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

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 4259-7X7K3U Issue Date: October 24, 2024

Seacliff Energy Corp. 1200 Mersea Road 1 Leamington, Ontario N8H 3V7

Site Location:1200 Mersea Road 1Learnington Municipality, County of Essex

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

a 24.12-hectare anaerobic digestion facility, to receive and process a maximum of 110,000 tonnes of off-farm Organic Waste per year to produce the renewable natural gas at an approximate maximum rate of 860 cubic metres per hour of renewable natural gas for injection into the natural gas distribution infrastructure and the total digestate at a maximum rate of 129,660 tonnes/year at 4.9% total solids or liquid digestate at a maximum rate of 127,970 tonnes per year at 4.6% total solids. The anaerobic digestion facility consists of the following processes and support units:

- receipt and temporary storage of Organic Waste;
- pre-treatment to remove non-biodegradable constituents of the Organic Waste and make the Organic Waste Slurry;
- transfer of the Organic Waste Slurry to an off-site anaerobic digestion facility or to Hydrolysis Tanks #1, #2 and #3;
- Hydrolysis/Pasteurization of the Organic Waste in Hydrolysis Tanks #1, #2 and #3;
- Anaerobic Digestion of pre-treated and mixed Organic Waste in Digesters #1, #2 and #3;
- production of Fertilizers and/or soil nutrients through separation of the solid and liquid components of the effluent from Digesters #1, #2 and #3;
- de-sulphurization of the Biogas produced by the Anaerobic Digestion of Organic Waste;
- cooling of the Biogas and generation of heat and electricity from combustion of Biogas in the combined heat and power engine producing electricity output of 1.6 Megawatts; or
- managing and upgrading Biogas into Renewable Natural Gas in Biogas Upgrading System,

comprising the following processes, working areas and equipment:

- o hydrogen sulphide and volatile organic compounds/siloxane reduction systems;
- o compression, chilling and moisture removal, and carbon dioxide, oxygen gas and nitrogen gas removal using membrane separation system or pressure swing adsorption system;
- o compression of Renewable Natural Gas to pipeline pressure requirements;
- Flare, operating as a stand-by combusion equipment for untreated or treated Biogas or the Renewable Natural Gas;

to be used for processing of the following types of waste generated in the Province of Ontario and the States of Michigan and Ohio:

Organic Waste, limited to solid or liquid waste derived from plants or animals, from residential and industrial, commercial and institutional sources, listed in Condition 3.1 of this Approval, all readily biodegradable in anaerobic digestion.

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

"Air/Noise Approval" means the environmental compliance approval and any Schedules attached to it, including the application and its supporting documentation for activities set out in section 9 of the EPA and carried out at the Site;

"ACR System" means Advance Contamination Removal system, as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval;

"VOCs" means volatile organic compounds;

"Adverse Effect" as defined in the EPA;

"Agricultural Source Material" is as defined in O. Regulation 267/03, made under the NMA ;

"**Digester(s)**" means the anaerobic digestion vessel(s) used for Anaerobic Digestion of the approved Organic Wastes and as defined in Regulation 347 and as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval;

"Anaerobic Digestion" means biological decomposition of organic matter by microorganism in an oxygen-limiting environment;

"Approval" means this Environmental Compliance Approval and any Schedules to it, including the application and Supporting Documentation;

"Area Manager" means the Area Manager of the Windsor Area Office of the Ministry or such other official of the Ministry as may be assigned the duties of the Area Manager;

"bar" is a unit of pressure;

"**Biofilter**" means the biofilter as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval and/or the Air/Noise Approval;

"**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;

"**BUS**" means Biogas Upgrading System for managing and upgrading Biogas into Renewable Natural Gas, and any associated gas treatment equipment and as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval;

"CHP System" means an existing combined heat and power system and as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval;

"Flare" means the treated or untreated Biogas and/or Renewable Natural Gas combustion equipment and any associated equipment and as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval and/or the Air/Noise Approval;

"CFIA" means the Canadian Food Inspection Agency;

"Clean-Out Material" means the Residual Waste removed from the Digesters due to floating or settling of the material and that has been recovered as part of maintenance of the Digesters;

"**Composite Sample**" means a sample that is made up of a number of Laboratory Service Provider grab samples from a single sample container that have been thoroughly mixed together;

"**cm**²" means square centimeter(s);

"**DAF**" means the Organic Waste produced in a dissolved air flotation process used for the treatment of waste water from facilities where food or feed is processed or prepared;

"Digestate" means the processed organic waste generated from Anaerobic Digestion at the Site;

"**Director**" means any Ministry employee appointed in writing by the Minister of the Ministry pursuant to section 5 of the EPA as a Director for the purposes of Part II.1 of the EPA;

"EASR" means the Environmental Activity and Sector Registry;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c. E. 19, as amended;

"**Equipment**" means the equipment for processes as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval;

"Facility" means the entire operation located on the property where the equipment is located;

"**Fertilizer**" means any substance or mixture of substances, containing nitrogen, phosphorus, potassium or other plant food, that is manufactured, sold or represented for use as a plant nutrient, as defined in the Fertilizers Act;

"Fertilizers Act" means the Fertilizers Act, R.S., 1985, c-F-10, as amended;

"**Final Disposal**" within the context of this Approval means land disposal and thermal treatment, both as defined in Regulation 347, and does not include handling, storing, transferring, treating or processing of waste at a land disposal or a thermal treatment site;

"Financial Assurance" is as defined in Section 131 of the EPA;

"FOG" means fats, oils and grease, of plant and animal origin, and accompanying food residuals collected from grease interceptors and/or grease traps at food production, food processing and/or food wholesale and retail facilities;

"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;

"Human Body Waste" means waste derived from or containing wastes from the human body, limited to used diapers and used sanitary products collected through the municipal source separated waste collection programs;

"Hydrolysis Tank(s)" means the vessels(s) used for Organic Waste pre-treatment through the anaerobic hydrolysis process as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval;

"Laboratory Service Provider" means a laboratory service provider that is accredited by an internationally recognized accreditation body which accredits laboratories under ISO/IEC 17025:2005 *General Requirements for the Competence of Testing and Calibration Laboratories,* as amended from time to time, including the Standards Council of Canada or the Canadian Association for Laboratory Accreditation;

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

"Leaf and Yard Waste" means the leaf and yard waste as defined in the Ontario Regulation 101/94, as

amended, made under the EPA;

"Liquid Digestate" means the liquid portion of the Digestate following liquid/solids separation with the filter presses;

"**Manual**" means a document or a set of documents that provide written instructions to staff of the Owner;

"**Malfunction**" means any sudden, unplanned, infrequent and not reasonably preventable failure of the equipment associated with maintaining of the negative pressure in the Processing Building, excluding failures that may be caused in part by poor maintenance or negligent operation;

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

"Mixed Anaerobic Digestion Facility" is as defined in Regulation 347;

"NASM" is as defined in O. Regulation 267/03, made under the NMA;

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

"mL" means millilitre;

"**m**²" means metres square;

"**off-farm**" means the source of the Organic Waste that is not an agricultural operation and is an off-farm residential and IC&I source listed in Condition 3.1;

"Off-Farm Anaerobic Digestion Materials" is as defined in O. Regulation 267/03 and Regulation 347;

"**On-Farm Anaerobic Digestion Materials**" is as defined in O. Regulation 267/03 and Regulation 347, and within the context of this Approval it means the Organic Waste that is generated at an agricultural operation and is destined for Anaerobic Digestion at the Site;

"**Organic Waste**" means solid or liquid waste derived from plants or animals, including On-Farm Anaerobic Digestion Materials and Organic Waste from residential and IC&I sources, all readily biodegradable and suitable for Anaerobic Digestion to produce a Fertilizer or a NASM and further described in Condition 3.1 of this Approval;

"Organic Waste Slurry" means pre-processed Organic Waste destined for transfer to an off-site anaerobic digestion facility;

"**Owner**" means Seacliff Energy Corp. that is responsible for the establishment and operation of the Site being approved by this Approval, any contractors that work on behalf of the Owner and includes any successors and assigns;

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

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

"**Pasteurization**" means a process where through time and heat treatment pathogens are inactivated to comply with the prescibed limits;

"processed organic waste" is as defined in Regulation 347;

"**Processing Building**" means the processing building where the Organic Waste is received, temporarily stored and pre-processed, prior to transfer to the Hydrolysis Tanks and the Digesters at the Site as proposed and described in the Owner's application, this Approval and in the Supporting Documentation, to the extent approved by this Approval;

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

"**Provincial Officer**" means any person designated in writing by the Minister of the Ministry as a provincial officer pursuant to Section 5 of the OWRA or Section 5 of the EPA or Section 17 of the PA or Section 4 of the NMA or Section 8 of the SDWA;

"**Regulation 347**" means Regulation 347, R.R.O. 1990, General - Waste Management, made under the EPA, as amended;

"**Rejected Waste**" means the incoming load inadvertently received at the Site and deemed by the Owner to be waste that does not meet the incoming Organic Waste quality criteria set out in this Approval or that cannot be processed;

"**Renewable Natural Gas**" means the Biogas upgraded in the BUS into Renewable Natural Gas, that complies with the criteria required by the onwer of the natural gas distribution infrastructure and which is destined for injection into natural gas distribution infrastructure;

"**Residual Waste**" means the waste resulting from the processing of the incoming Organic Waste at the Site and which requires Final Disposal or further processing off-Site;

"**Repository**" and "**Process Water Tank**" mean the tank for temporary storage of Liquid Digestate, as described in the Supporting Documentation, to the extent approved by this Approval;

"RMAD" means a regulated mixed anaerobic digestion facility, as defined in O. Regulation 267/03;

"RTO" means regenerative thermal oxidizer and as proposed and described in the Owner's application,

this Approval and in the Supporting Documentation, to the extent approved by this Approval and/or the Air/Noise Approval;

"**Sampling and Analysis Protocol**" means the document entitled "Sampling and Analysis Protocol for Ontario Regulation 267/03 made under the *Nutrient Management Act, 2002*", prepared by the Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment, Conservation and Parks and dated July 1, 2021, as amended;

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

"Site" means the entire waste disposal site, located at 1200 Mersea Road 1, Municipality of Learnington, County of Essex, and as shown in the supporting documentation listed in the attached Schedule 1;

"Slump Test" means the Test Method for the Determination of Liquid Waste set out in Schedule 9 of Regulation 347;

"**Solid Digestate**" means the solid portion of the Digestate following liquid/solids separation with the filter presses, as described in the Supporting Documentation, to the extent approved by this Approval;

"**Solids Separation Building**" means the building at the Site where the Solid Digestate is separated from the Liquid Digestate and where the Solid Digestate is temporarily stored prior to transfer for use in agricultural activities, as described in the Supporting Documentation, to the extent approved by this Approval;

"Spill" is as defined in the EPA;

"**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;

"**Trained Personnel**" means one or more Site personnel trained in accordance with the requirements of Condition 11.2. including an employee trained or knowledgeable through instruction and/or practice and able to carry out any necessary duties related to management of waste as approved in this Approval;

"**Trucks**" means the reagent truck(s) and the waste truck(s);

"**TSA System**" means the temperature swing adsorption system, as described in the Supporting Documentation, to the extent approved by this Approval;

"Waste" means the waste approved for receipt at the Site and waste in-process; and

"**waste**" within the context of this Approval, it means any material defined as a waste or designated to be a waste under any Ontario regulation or any other discarded, unwanted, unsuitable for its original use or purpose (for example off-specification or expired) post-consumer goods, items or materials. Any outputs from processing/treatment of waste at a waste disposal site continue to be considered waste.

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

TERMS AND CONDITIONS

1.0 GENERAL

1.1 Compliance

- (1) The Owner 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 Site is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Any person authorized to carry out work on or operate any aspect of the Site shall comply with the conditions of this Approval.

1.2 Build, etc. in Accordance

- (1) Except as otherwise provided by this Approval, the Site shall be designed, developed, built, operated and maintained in accordance with the application for this Environmental Compliance Approval dated April 28, 2009, signed and submitted by Roger Tiessen, Seacliff Energy Inc. and the supporting documentation listed in the attached Schedule 1.
- (2) The Biogas Upgrading System, and the associated changes to the Site set out in Items # 24 through 31 of Schedule 1 shall be constructed and/or installed and must commence operation, within five (5) years of issuance of this Approval, after which time the Approval of Items # 24 through 31 of Schedule 1 ceases to apply in respect of any portions of the Site not in operation. In the event that the construction, installation and/or operation of any portion of the Site is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).

1.3 As-built Drawings

(1) A set of as-built drawings, certified by a Professional Engineer and showing the design of the Site, shall be kept at the Site at all times.

1.4 Interpretation

(1) Where there is a conflict between a provision of any document, including the application referred

to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.

- (2) Where there is a conflict between the application and a provision in any documents listed in Schedule 1, the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and that the Ministry approved the amendment.
- (3) Where there is a conflict between any two documents listed in Schedule 1 other than the application, the document bearing the most recent date shall take precedence.
- (4) 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.

1.5 Other Legal Obligations

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

1.6 Adverse Effect

- (1) The Site shall be constructed, operated and maintained in a manner which ensures the health and safety of all persons and prevents generation of negative environmental impacts including but not limited to dust, odours, vectors, pests, birds, litter, vibration, noise and any other negative environmental effects that may cause an Adverse Effect.
- (2) If at any time dust, including dust from vehicles leaving the Site, odours, vectors, pests, birds, litter, vibration, noise or other such negative environmental effects are generated at the Site and cause an Adverse Effect, the Owner shall take immediate and appropriate remedial action(s) that is/are necessary to alleviate the Adverse Effect, including suspension of all waste management activities and removal of waste from the Site, if necessary.
- (3) The Owner shall take steps to minimize and ameliorate any Adverse Effect on the natural environment or impairment of water quality resulting from the approved operations at the Site,

including such steps as accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

1.7 Change of Owner and Operator

- (1) The Owner shall notify the Director in writing, and forward a copy of the notification to the Area Manager, within thirty (30) days of the occurrence of any change in:
 - a. the ownership of the Site;
 - b. the operator of the Site;
 - c. the address of the Owner;
 - d. the partners, where the Owner 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; or
 - e. the name of the corporation where the Owner 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.
- (2) The Owner shall notify the Area Manager, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of the Operator; and
 - b. change of the Operator, including address of the new Operator.
- (3) No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance. In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the Area Manager and the Director.

1.8 Inspections by the Ministry

- (1) No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, the PA, the SDWA or the NMA of any place to which this Approval relates, and without limiting the foregoing:
 - a. 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;

- b. to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
- c. to inspect the Site, related equipment and appurtenances;
- d. to inspect the practices, procedures, or operations required by the conditions of this Approval;
- e. to conduct interviews with staff, contractors, agents and assignees of the Owner; and
- f. to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the EPA, the OWRA, the PA, the SDWA or the NMA.

1.9 Information and Record Retention

- (1) Any information requested by the Ministry, concerning the operation of the Site and its operation under this Approval, including but not limited to any records required to be kept by this Approval shall, upon request, be provided to the Ministry in a timely manner and in a format specified by the Ministry. All records shall be retained for five (5) years except as otherwise authorized in writing by the Director.
- (2) 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:
 - a. 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
 - b. acceptance by the Ministry of the information's completeness or accuracy.
- (3) The Owner shall ensure that a copy of this Approval, in its entirety and including all its Notices of Amendment, and the documentation listed in Schedule 1, are retained at the Owner's office at all times.

1.10 Financial Assurance

- (1) The Owner shall maintain the existing Financial Assurance in the amount of CAN\$86,666.00. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Site clean-up and disposal of all approved quantities of waste on the Site at any one time.
- (2) Commencing on July 31, 2029 and at intervals of five (5) years thereafter, the Owner shall submit to the Director, a re-evaluation of the amount of Financial Assurance to implement the actions required under Condition 1.10.(1). The re-evaluation shall include an assessment based on any new information relating to the environmental conditions of the Site and shall include the costs

of additional monitoring and/or implementation of contingency plans required by the Director upon review of the closure plan and annual reports. The Financial Assurance must be submitted to the Director within thirty (30) calendar days of written acceptance of the re-evaluation by the Director.

(3) The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion. If any Financial Assurance is scheduled to expire or notice is received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial Assurance at least sixty (60) days before the Financial Assurance terminates, the Financial Assurance shall forthwith be replaced by cash.

1.11 Other Approvals

(1) Within eighteen (18) months from the date of this Approval, the Owner shall submit a complete application for an Air/Noise Approval.

2.0 SIGNS and SITE SECURITY

2.1 Signs

- (1) The Owner shall ensure that a sign is posted at the entrance to the Site, readable from the nearest public roadway bordering the Site. The following information shall be included on the sign:
 - a. name of the Owner;
 - b. this Approval number;
 - c. normal hours of operation;
 - d. Owner's telephone number to which complaints may be directed;
 - e. Owner's twenty-four hour emergency telephone number (if different from above);
 - f. a warning against unauthorized access; and
 - g. a warning against dumping at the Site.
- (2) The Owner shall install and maintain appropriate and visible signs at the Site to direct vehicles to the Organic Waste receiving areas and the Digestate and the Residual Waste removal areas.
- (3) The Owner shall post appropriate and visible signs along the traffic route providing clear directions to the Site and to all Organic Waste drop-off areas clearly identifying the acceptable Waste types and other appropriate instructions.

2.2 Site Security

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

3.0 SERVICE AREA, APPROVED WASTE TYPES and RATES

3.1 Service Area and Approved Waste Types

- (1) The Owner may only accept Organic Waste from the Province of Ontario and the States of Michigan and Ohio, limited to Organic Waste from the following IC&I sources:
 - a. bakeries
 - b. confectionary processing facilities
 - c. dairies and facilities that process dairy products
 - d. fruit and vegetable processing facilities
 - e. cereal and grain processing facilities
 - f. oil seed processing facilities
 - g. snack food processing facilities
 - h. snack food manufacturing facilities
 - i. breweries and distillers grain
 - j. wineries
 - k. beverage manufacturing facilities

- 1. food processing facilities
- m. grocery stores
- n. food distribution companies
- o. milling facilities
- p. fruit and vegetable packing facilities; and
- q. any other source allowed in writing by the Area Manager.
- (2) The Owner may accept SSO from the municipal curbside collection programs, including SSO containing Human Body Waste, limited to soiled diapers, soiled incontinence products, soiled sanitary products and pet waste, originating from the Province of Ontario.
- (3) The Site is not approved to receive the following waste types:
 - a. any waste that is classified as hazardous waste in accordance with Regulation 347;
 - b. 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;
 - c. 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;
 - d. any untreated septage as defined in O. Regulation 267/03 or hauled sewage as defined in Regulation 347;
 - e. any sewage sludge, which within the context of this Approval means the organic materials resulting from treatment of sewage up-to the anaerobic digestion processing step at sewage works, where the sewage works is subject to the requirements under the OWRA and,
 - i. means any works for the collection, transmission, treatment and disposal of sewage or any part of such works, but does not include plumbing to which the *Building Code Act*, 1992 applies; and
 - ii. is owned by a municipality or is privately owned;
 - iii. is owned by the Crown or the Ontario Clean Water Agency, subject to an agreement with a municipality under the OWRA; or
 - iv. receives only waste similar in character to the residential (domestic) sewage from a household;
 - f. any biosolids, which within the context of this Approval mean the organic materials resulting from treatment of sewage, including the anaerobic digestion processing step at sewage works;

- g. dedicated loads of soiled diapers, soiled incontinence products, soiled sanitary products and pet waste from the IC&I sources;
- h. any liquid IC&I waste that does not meet the definition of the Organic Waste;
- i. any SSO that contains or is suspected of containing by-products taken from aircraft, passengers and/or crew of the aircraft arriving in Ontario; and
- j. any SSO that contains or is suspected of containing by-products taken from a vessel, passengers and/or crew of vessels arriving in Ontario.

3.2 Waste Receipt Rates

- (1) The Owner is approved to receive the Organic Waste in quantities that are not to exceed:
 - a. a maximum of 1,000 tonnes of Organic Waste daily; and
 - b. a maximum of 110,000 tonnes of Organic Waste annually.

4.0. SITE OPERATIONS

4.1 **Operating Hours**

- (1) The Owner shall ensure that the Organic Waste is only received at the Site between the hours of 6:00 a.m. to 11:00 p.m. Monday through Saturday.
- (2) The Owner is approved to undertake waste management activities at the Site twenty-four (24) hours per day, seven (7) days per week.

4.2 Incoming Organic Waste Receipt

- (1) The Owner shall inspect all incoming Organic Waste loads and the accompanying waste characterization documentation to ensure that only waste that is approved under this Approval is received at the Site.
- (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 Site and shall immediately be directed off-Site.
- (3) The Owner shall establish and implement a waste screening and tracking system for all Organic Waste received, processed, stored at and transferred from the Site.
- (4) Upon arriving at the Site, the Organic Waste shall be forthwith unloaded within the confines of the Processing Building.

4.3 Rejected Waste Handling

- (1) In the event that Organic Waste that does not meet the quality criteria from this Approval is inadvertently accepted at the Site, the Owner shall ensure that all Rejected Waste:
 - a. is handled and removed from the Site in accordance with Regulation 347 and the EPA;
 - b. is stored within the confines of the Processing Building, away from all other waste and materials; and
 - c. is removed from the Site within forty eight (48) hours of its receipt or as acceptable to the Area Manager.
- (2) In the event that an Organic Waste load is refused or unacceptable waste is inadvertently accepted at the Site, a record shall be made in the daily log book or in an electronic file of the reason why the waste was refused and of the origin of the waste.
- (3) Area Manager shall be notified in writing of the receipt of unacceptable loads within three (3) business days.
- (4) The following information shall be included in the notification to the Area Manager:
 - a. quantity and type of waste refused;
 - b. source of the waste;
 - c. final destination of the Rejected Waste, if known; and
 - d. time and date of receipt and time and date of removal from the Site.

4.4 Storage

- (1) The Owner is approved to store the following maximum amounts of waste at the Site:
 - a. No more than 200 cubic metres of DAF and/or other approved liquid Organic Waste shall be stored at the Site, at any one time.
 - b. No more than 200 cubic metres of FOG and/or other approved liquid Organic Waste shall be stored at the Site, at any one time.
 - c. No more than 200 cubic metres of solid Organic Waste shall be stored in the leak-proof receiving pit located within the Processing Building, at any one time.
 - d. No more than 100 cubic metres of the Organic Waste Slurry shall be stored in each of two (2)

Slurry Storage Tanks located within the Processing Building, at any one time.

- e. No more than 650 cubic metres of Organic Waste being processed shall be contained within the Hydrolysis Tank #1, at any one time.
- f. No more than 650 cubic metres of Organic Waste being processed shall be contained within the Hydrolysis Tank #2, at any one time.
- g. No more than 650 cubic metres of Organic Waste being processed shall be contained within the Hydrolysis Tank #3, at any one time.
- h. No more than 3,170 cubic metres of Organic Waste being processed shall be contained within the Digester #1, at any one time.
- i. No more than 3,170 cubic metres of Organic Waste being processed shall be contained within the Digester #2, at any one time.
- j. No more than 3,170 cubic metres of Organic Waste being processed shall be contained within the Digester #3, at any one time.
- k. No more than 550 cubic metres of Liquid Digestate shall be contained within the Repository Tank, at any one time.
- 1. No more than 3,598 cubic metres of Liquid Digestate shall be contained within the Future Storage Tank, at any one time.
- m. No more than 11,900 tonnes of Solid Digestate shall be contained within the confines of its storage bunker, at any one time.
- n. As a minimum, Solid Digestate shall be moved from its storage bunker into the Processing Building at the end of each processing day.
- o. Solid Organic Waste stored in the receiving pit shall be processed within twenty four (24) hours from the time of its receipt;
- (2) The Owner shall ensure that sufficient storage capacity is available in the liquid Organic Waste storage tanks prior to unloading of the liquid Organic Waste from the transport vehicles into the storage tanks.
- (3) The Owner shall ensure that the levels in the liquid Organic Waste storage and Processing Tanks are monitored and controlled on a continuous basis and that the high level alarms are operational at all times.
- (4) The Owner shall ensure that sufficient storage capacity is available in the Organic Waste storage receiving pit prior to unloading of the solid Organic Waste from the transport vehicles into the

pit.

- (5) No on-Site storage of the Organic Waste in its transportation vehicle is approved under this Approval.
- (6) The Owner shall ensure that the Organic Waste processing tanks, the Repository Tank and the Future Storage Tank are located within the spill containment area designed in accordance with the Supporting Documentation.
- (7) The Owner shall ensure that the Organic Waste limited to ensiled waste vegetables and the Solid Digestate is stored within the confines of the outdoor storage bunker designed in accordance with the Supporting Documentation.
- (8) The Owner shall ensure that the Organic Waste limited to ensiled waste vegetables and the Solid Digestate is completely covered and stored in a manner that minimizes the generation of wastewater and odours.
- (9) Storage of all liquid reagents to be used at the Site shall be within a spill containment system as described in the Supporting Documentation.
- (10) Storage of solid Residual Waste at the Site is subject to the following limitations:
 - a. no more than 40 tonnes of solid Residual Waste, limited to Residual Waste resulting from Organic Waste processing at the Site, shall be stored at the Site at any one time;
 - b. solid Residual Waste limited to Residual Waste resulting from the Organic Waste processing at the Site shall be stored in a bin located within the confines of the Processing Building.
- (11) Solid putrescible waste generated through activities not relating to the handling and processing of the Organic Waste (ie. office, lunch room, etc.) shall be handled in a manner that does not create an adverse effect and in accordance with the requirements of Regulation 347.
- (12) No outside waste storage other than that described above, is approved under this Approval.
- (13) The Owner shall ensure that all indoor waste storage areas are located within the confines of the Processing Building.
- (14) In the event that Organic Waste cannot be processed at the Site and the Site is at its approved waste storage capacity, the Owner shall cease accepting additional waste. Receipt of additional Organic Waste may be resumed once such receipt complies with the waste storage limits approved in this Approval.

4.5 Approved Processing

(1) The following Organic Waste management/processing activities are approved under this

Approval:

- a. receipt and temporary storage of the Organic Waste;
- b. pre-processing to remove non-biodegradable constituents from the Organic Waste to produce the Organic Waste Slurry;
- c. transfer of the Organic Waste Slurry to the Hydrolysis Tanks #1, #2 and #3 or to two (2) Slurry Storage Tanks;
- d. temporary storage of the Organic Waste Slurry in two (2) Slurry Storage Tanks for either transfer to the Hydrolysis Tanks #1, #2 and #3 at the Site or to an off-site anaerobic digestion facility;
- e. transfer of the Organic Waste Slurry to the Hydrolysis Tanks #1, #2 and #3 at the Site or to an off-site anaerobic digestion facility;
- f. Hydrolysis/Pasteurization of the Organic Waste Slurry in Hydrolysis Tanks #1, #2 and #3;
- g. Anaerobic Digestion in the following Digesters:
 - i. two (2) existing mechanically mixed, insulated and heated Digesters #1 and #2 that have been covered with a dual membrane cover with a maximum permeability of 200 mL/m² /day/bar; and
 - ii. one (1) existing mechanically mixed, insulated and heated Digester #3 that is covered with a fixed roof;
- h. de-watering of the Digestate to separate solid and liquid constituents of the Digestate into Liquid Digestate and Solid Digestate;
- i. temporary storage of the Liquid Digestate;
- j. temporary storage of the Solid Digestate.
- k. Biogas treatment as follows:
 - i. removal of hydrogen sulphide (H₂S) using an absorbent media system (activated carbon or FerroSorp, a product based on Iron (III) Oxide-Hydroxide and FeO(OH));
 - ii. removal of VOCs and siloxanes using using an activated carbon system and/or TSA or the ACR System;
- 1. Treated Biogas upgrading into Renewable Natural Gas in a membrane separation system or a Pressure Swing Adsorption (PSA) system, by separating carbon dioxide (CO₂), nitrogen gas

 (N_{2}) , oxygen gas (O_{2}) and water vapour from methane (CH_{2}) ;

- m. Biogas cleaning in the existing equipment or as described in Condition 4.5(1)k. and production of the renewable electricity and thermal energy from Treated Biogas through an existing 1,600 kWh CHP System;
- n. BUS condensate recirculation back into the Anaerobic Digestion process;
- o. exhausting the tail gas from the BUS into the RTO and then to the atmosphere or as approved in the Air/Noise Approval; and
- p. emergency combusion of the treated or untreated Biogas in the Flare during periods when the Biogas treatment and upgrading systems are down or when Biogas generation exceeds the capacity of the Biogas treatment and upgrading systems or when the upgraded Biogas does not meet the required quality criteria;
- (2) The Owner shall ensure that the pre-processing to remove non-biodegradable constituents from the Organic Waste and the production of the Organic Waste Slurry does not generate plastics with lengths of less than 5 millimetres or as set out in section 98.4(1)1.6 iv. of O. Regulation 267/03.
- (3) The Owner shall ensure that the incoming Organic Waste received at the Site, and handled in accordance with this Approval, is used as feedstock in the on-Site Digesters #1, #2 and #3 or to produce the Organic Waste Slurry for transfer from the Site to the allowed destinations, as prescribed in this Approval.
- (4) The Owner shall ensure that all windows and doors of the Processing Building are closed at all times, except when the doors are used for necessary personnel or vehicle entrance and exit.
- (5) The Owner shall ensure that any two doors within the Processing Building are not open at the same time.

4.6 Hydrolysis/Pasteurization

- (1) The Owner shall ensure that the Organic Waste Slurry Hydrolysis/Pasteurization in the Hydrolysis Tanks is undertaken at a minimum temperature of 70°C for a minimum of one (1) hour or at a minimum temperature of 50°C for a minimum of twenty (20) hours to ensure complete inactivation of pathogens in the incoming Organic Waste.
- (2) The temperature of Hydrolysis/Pasteurization in the Hydrolysis Tanks must be monitored to verify compliance with subsection 4.6(1) above.
- (3) The Owner shall track the monitoring results of the time and temperature of the Pasteurization as proposed in the Supporting Documentation to demonstrate compliance with the Pasteurization

requirements in Condition 4.6(1).

4.7 Anaerobic Digestion

- (1) Treatment of the Organic Waste in the Anaerobic Digesters shall be carried at temperature range as set out in the Supporting Documentation, at all times.
- (2) The Owner shall ensure that a minimum hydraulic retention time of the Organic Waste in the Anaerobic Digester #1, #2 and #3 is at least as proposed in the Supporting Documentation, at all times.

4.8 Biogas Management

- (1) The Digesters shall be covered with a double membrane cover with the inner membrane having permeability of less than $500 \text{ cm}^3/\text{m}^2/\text{day}/\text{bar}$ at 23°C .
- (2) The air in the space between the double membrane shall be managed to prevent uncontrollable emissions.
- (3) As proposed in the Supporting Documentation, the Biogas from the headspace of the Digesters shall be contained and exhausted to,
 - a. the BUS to be treated to meet the requirements for the Renewable Natural Gas;
 - b. the existing CHP System; or
 - c. the Flare for combustion.
- (4) Any treated Biogas which does not meet the required Renewable Natural Gas quality criteria shall be transferred back to the headspace of the Digesters, be re-treated in the BUS or be combusted in the Flare.
- (5) The Owner shall maintain the existing Flare as a fully functional stand-by system, at all times.
- (6) When there is a process upset and/or when the Biogas Management System is inoperable or producing treated Biogas that is not suitable for injection into the pipeline, the Flare shall be utilized to combust the Biogas if it cannot be transferred back to the headspace of the Digesters.
- (7) The Owner shall electronically monitor the over/under pressure relief valves on the Digesters to ensure that if they are open, it is recorded and the Owner is notified. Should any unintentional raw (untreated) Biogas be released from the over/under pressure relief values to the atmosphere, regardless of quantity, the Owner shall immediately notify the Ministry, in writing.
- (8) The Owner shall manage the operation, monitoring and maintenance of the Flare and its discharges to the atmoshere in accordance with this Approval unless otherwise set out and

required in the Air/Noise Approval.

(9) The Owner may continue generation of heat and electricity in the existing CHP engine, as proposed in the Supporting Documentation.

4.9 Outgoing Processed Organic Waste handling

- (1) All outgoing Liquid Digestate shall be pumped from the Repository Tank or from the Future Storage Tank, when this tank is constructed.
- (2) The Owner shall ensure that the Solid Digestate temporary storage at the Site prior to its transfer off-Site is within the confines of the Processing Building in accordance with this Approval.
- (3) Loading of Digestate, Liquid Digestate and the Organic Waste Slurry into tankers for transfer from the Site, shall be done within the confines of the Processing Building.

4.10 Residual Waste Handling

- (1) All Residual Waste removed from the Site for Final Disposal shall only be disposed of at a site for which an environmental compliance approval has been issued by the Ministry and the site is approved to receive this type and quantity of waste.
- (2) All Residual Waste shall be stored in bins located within the confines of the Processing Building.
- (3) The Owner shall remove the Residual Waste from the Site when the storage bins are full or as directed by the Area Manager.
- (4) Provided that the Residual Waste from the BUS including spent activated carbon, FerroSorp, the TSA System adsorption media is a solid non-hazardous waste, the Owner shall package it, temporarily store it and dispose of it as proposed in the Supporting Documentation.
- (5) The spent ACR System adsorption medium shall be collected, temporarily stored and disposed of as proposed in the Supporting Documentation.
- (6) If any Residual Waste from the BUS is deemed to be subject waste as defined in in Regulation 347, the Owner shall package it and temporarily store it as proposed in the supporting documentation listed in the attached Schedule 1 and dispose of it in accordance with the requirements set out in Regulation 347, including registration on the Hazardous Waste Program Registry, as required.

4.11 Wastewater Management

(1) The Owner shall ensure that all wastewater generated within the Processing Building is:

- a. contained within the Processing Building;
- b. collected in the sufficiently designed wastewater storage; and
- c. either utilized in the process or disposed of at a Ministry-approved site.
- (2) The Owner shall regularly empty, clean and disinfect if necessary, all sumps or wastewater storage/holding areas that are used to contain and collect the wastewater generated within the Processing Building.
- (3) Should the wastewater collected in the outdoor containment area sump become contaminated, the Owner shall ensure that it is handled in accordance with the environmental compliance approval for the activities set out in section 53 of the OWRA.
- (4) The run-off from the outdoor storage bunker shall be handled in accordance with the environmental compliance approval for the activities set out in section 53 of the OWRA.
- (5) The condensate from the BUS shall be trabsferred to the Anaerobic Digestion process for re-use.

4.12 **Prohibitions**

- (1) No outside Organic Waste storage other than that described above, is approved under this Approval.
- (2) No storage of incoming Organic Waste in its transportation vehicle is approved under this Approval.
- (3) Burning of any Wastes, other than the Biogas or the Renewable Natural Gas, as approved in this Approval, is prohibited at the Site.
- (4) Other uses of the Renewable Natural Gas produced at the Site, other than use at the Site or injection into the natural gas distribution infrastructure, are not approved under this Approval.
- (5) There shall be no public access to the Site for any waste drop off.

5.0. SITE INSPECTIONS and EQUIPMENT MAINTENANCE

5.1 Inspections

- (1) The Owner shall prepare a comprehensive written inspection program which includes all aspects of the Site's operations including impacts having a potential to cause an adverse effect.
 - a. Organic Waste, Digestate, Liquid Digestate and Solid Digestate and any other waste/materials loading/unloading/storage/handling areas;

- b. condition of all major pieces of the equipment;
- c. condition of all instruments for monitoring required under this Approval;
- d. security fence and property line;
- e. presence of excessive fugitive dust emissions from the operation of the Site;
- f. presence of the on and off-Site litter; and
- g. presence of off-Site odours.
- (2) The inspection program shall be up-dated, as required, shall be retained at the Site and be made available for inspection by a Provincial Officer, upon request.
- (3) The inspections are to be undertaken daily by Trained Personnel in accordance with the inspection program to ensure that all equipment and facilities at the Site are maintained in good working order at all times. Any deficiencies detected during these regular inspections must be promptly corrected.

5.2 Spare Parts

- (1) The Owner 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 Site and be made available for inspection by a Provincial Officer, upon request.
- (2) The Owner shall ensure that the critical spare parts are available at the Site at all times or be immediately available from an off-Site supplier or as acceptable to the Area Manager.

5.3 Maintenance

- (1) The Owner shall ensure that the Equipment is properly operated and maintained at all times.
- (2) The Owner shall prepare, not later than three (3) months after the date of this Approval, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers.
- (3) The Owner shall implement the recommendations of the Manual.
- (4) The Owner 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.
- (5) The preventative maintenance program shall be maintained up-to-date, be retained at the Site and

be available for inspection by a Provincial Officer, upon request.

6.0 WASTE QUALITY CRITERIA

6.1 Use of Latest Data

(1) For the purpose of demonstrating compliance with the quality criteria set out in Conditions 6.2 through 6.6, the Owner shall use the most recent results of the required analysis.

6.2 Incoming Organic Waste Quality Criteria

(1) The Owner shall ensure that the incoming Organic Waste from each off-farm source, prior to pre-processing or after pre-processing if contamination needs to be removed at the Site, complies with the metal content limits for the Off-Farm Anaerobic Digestion Materials set out in O. Regulation 276/03 for solids and with the maximum metal concentrations set out in column 2 of Table 1 of Schedule 5 of O. Regulation 267/03 for liquids.

6.3 Outgoing Organic Waste Slurry Quality Criteria

- (1) If the outgoing Organic Waste Slurry is managed as a feedstock for a mixed anaerobic digestion facility located at a waste disposal site having an environmental compliance approval, the outgoing Organic Waste Slurry shall meet the quality criteria required by the conditions of the environmental compliance approval for the site where it is to be transferred to and as required by the receiving site owner.
- (2) Notwithstanding provisions of Condition 6.3(1), the outgoing Organic Waste Slurry destined for a RMAD shall comply with the quality criteria set out in section 98.4 of O. Regulation 267/03.

6.4 Digestate, Liquid Digestate, Solid Digestate or the Clean-Out Material Quality Criteria

- (1) If the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-Out Material is managed as a NASM destined for land application on agricultural land, the following criteria shall be complied with:
 - a. the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-Out Material shall contain a minimum of 15% of total organic matter/weight of the solids;
 - b. unless O. Regulation 267/03 requires otherwise, the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-Out Material to be land-applied as a NASM, shall comply with the following requirements:
 - i. regulated metal shall not exceed the maximum concentrations set out in column 2 or 3, as applicable, of Table 2 of Schedule 5 of O. Regulation 267/03;

- ii. pathogen level limits set out in Schedule 6 of O. Regulation 267/03, as applicable;
- iii. Foreign Matter shall not exceed 2% calculated on a dry basis,
- iv. plastics shall not exceed 0.5% calculated on a dry basis; and
- v. there shall not be any particle with size greater than 2.5 cm^2 .
- (2) If the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-Out Material is managed as a waste destined for land application on non-agricultural land in accordance with an approval environmental compliance,
 - a. the Digestate, the Liquid Digestate, the Solid Digestate or 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 Digestate, the Liquid Digestate, the Solid Digestate or the Clean-Out Material is to be land-applied, it shall meet the requirements set out in Condition 6.4(1) of this Approval.

6.5 Residual Waste Quality Criteria

(1) Any Residual Waste, including the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-Out Material, to be transferred for further processing or Final Disposal shall meet the quality criteria required by the conditions of the environmental compliance approval for the site where it is to be transferred to and as required by the receiving site owner.

6.6 Renewable Natural Gas Quality Criteria

(1) Renewable Natural Gas shall comply with the applicable criteria required by the owner/operator of the natural gas distribution infrastructure for its intended injection into the said natural gas distribution infrastructure.

7.0 TESTING and MONITORING

7.1 Sampling and Testing Methods

- (1) The collection and analysis of samples of the incoming Organic Waste from the off-farm sources, the Digestate, the Liquid Digestate, the Solid Digestate, the Organic Waste Slurry or the Clean-Out Material shall be performed in accordance with the Sampling and Analysis Protocol.
- (2) Analysis of samples of the incoming Organic Wastes from the off-farm sources, and of the Digestate, the Liquid Digestate, the Solid Digestate, the Organic Waste Slurry or the Clean-Out

Material shall be performed 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.
- (3) The Owner shall ensure a copy of the analysis sets out the metal concentration in each Organic Waste in:
 - a. 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
 - b. 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.

7.2 Characterization of Incoming Organic Waste from an Off-Farm Source

- (1) The Owner shall ensure that prior to its first acceptance of a given new incoming Organic Waste from an off-farm source, the incoming Organic Waste is characterized for metals during the 14-day period preceding its first-time receipt at the Site.
- (2) If the Owner 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 incoming Organic Waste to be received at the Site are in compliance with the incoming Organic Waste metals quality criteria required under this Approval.
- (3) If the published data is not available or used to confirm compliance of the incoming Organic Waste with the metal quality criteria from this Approval, the Owner shall ensure that analytical data from sampling and testing of the incoming Organic Waste is used to confirm compliance with the incoming Organic Waste metal quality criteria required under this Approval.
- (4) When sampling and testing of the incoming Organic Waste from Condition 7.2(3) is required, the Owner shall ensure that,
 - a. composite samples are collected as follows:
 - i. for liquids, at least 1 composite sample composed of no less than 5 sub-samples is collected, and
 - ii. for solids, at least 1 composite sample composed of no less than 10 sub-samples is collected;

- b. following initial sampling and testing of the Organic Waste, subsequent sampling and metal content analysis is conducted for 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; and
- c. if after the first twelve (12) months of sampling and analysis the results are consistent and continuously below the prescribed limits, sampling and analysis is 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 from the source.
- (5) The Owner shall ensure that each sample of the incoming Organic Waste has been analysed for metals listed in column 1 of Table 1 of Schedule 5 of O. Regulation 267/03, in accordance with the methods and sampling frequencies specified in this Approval.
- (6) If the initial or the subsequent testing determine that the concentration of any metal in an incoming Organic Waste exceeds the maximum metal concentrations set out in Condition 6.1, the Owner shall reject the receipt of that Organic Waste.
- (7) In order to resume accepting a given Organic Waste following previous rejection, the Owner shall ensure that the analytical requirements listed in this Approval have been fulfilled and that two (2) independent composite samples of the said Organic Waste generate analytical results which, separately and consecutively, do not exceed the metal content limits set out in Condition 6.1.
- (8) When sampling and re-testing of the incoming Organic Waste from Condition 7.2(7) is required, the Owner shall ensure that the composite samples are collected as follows:
 - a. for liquids, at least 1 composite sample composed of no less than 5 sub-samples is collected, and
 - b. for solids, at least 1 composite sample composed of no less than 10 sub-samples is collected.
- (9) Should results of testing of the incoming Organic Waste for metals fail to meet the quality criteria specified in this Approval, the said Organic Waste shall be handled in accordance with the Contingency and Emergency Response Plan.

7.3 Testing of Digestate, Liquid Digestate and/or Solid Digestate for Foreign Matter, Plastics, Metals and Pathogens

- If the Digestate, the Liquid Digestate or the Solid Digestate are managed as a NASM destined for land application on agricultural land or as a Fertilizer, as a minimum, the Owner shall collect one (1) sample per month from the outlet of the Digestate or the Liquid Digestate storage or from the Solid Digestate stockpile and analyze the samples for
 - a. Foreign Matter;

- b. Plastics; and
- c. regulated metals listed in Table 2 of Schedule 5 of O. Regulation 267/03.
- (2) If the Digestate, the Liquid Digestate and the Solid Digestate is managed as a CP1 NASM destined for land application on agricultural land, as a minimum, the Owner shall collect one (1) sample per month from the outlet of the Digestate or the Liquid Digestate storage or from the Solid Digestate stockpile, and analyze each of the samples for:
 - a. Total Solids content (%);
 - b. Faecal coliforms;
 - c. E.coli; and
 - d. Salmonella.
- (3) If the Digestate, the Liquid Digestate and the Solid Digestate is managed as a CP2 NASM destined for land application on agricultural land, as a minimum, the Owner shall collect one (1) sample per month from the outlet of the Digestate or the Liquid Digestate storage or from the Solid Digestate stockpile, and analyze each of the samples for:
 - a. Total Solids content (%); and
 - b. E.coli.
- (3) Notwithstanding provisions of Conditions 7.3(2) and 7.3(3), upon a written request from the Area Manager, the Owner shall sample and test the Digestate, the Liquid Digestate and the Solid Digestate for any pathogen including the organisms listed in Table 1 of Schedule 6 of O. Regulation 267/03.

7.4 Testing of Clean-Out Material

- If the Clean-Out Material is managed as a NASM destined for land application on agricultural land, the Owner shall test the Clean-Out Material in accordance with the requirements in the O. Regulation 267/03 and as required by the receiving site owner.
- (2) If the Clean-Out Material is managed as a waste destined for land application on non-agricultural land, further processing or Final Disposal, the Owner shall test the Clean-Out Material in accordance with the requirements in the environmental compliance approval for the receiving site and as required by the receiving site owner.

7.5 Testing of the Organic Waste Slurry

- (1) Any Organic Waste Slurry produced at the Site to be transferred to a RMAD, shall comply with testing requirements set out in section 98.4(1) of O. Regulation 267/03.
- (2) Any Organic Waste Slurry produced at the Site to be transferred to a waste disposal site or a renewable energy site for Anaerobic Digestion of the Organic Waste Slurry, shall comply with the incoming Organic Waste or feedstock testing requirements set out in the environmental

compliance approval or the renewable energy approval for the site/facility and as required by the receiving site owner.

(3) To complete the testing requirements from Conditions 7.5(1) and 7.5(2), the Owner shall take representative samples of the Organic Waste Slurry from the Slurry Storage Tank outlet.

7.6 **Process Monitoring**

- (1) The temperature of the processing in the Hydrolysis Tanks shall be monitored to verify compliance with Condition 4.6, above.
- (2) The volume level and temperature of the processing in the Digesters #1, #2 and #3 shall be monitored to verify compliance with Condition 4.7, above.
- (3) The Biogas and the Renewable Natural Gas production rate and quality shall be monitored in accordance with the proposal set out in the Supporting Documentation.

8.0 END-USE of OUTPUTS

8.1 End-use of Digestate and the Clean-out Material

- (1) All the Digestate, the Liquid Digestate and the Solid Digestate shipped from the Site as a Fertilizer must be accompanied by a Product Label that has been approved by the CFIA.
- (2) Subject to the CFIA's Fertilizer registration requirements, prior to each initial shipment for each Fertilizer label, the Owner shall provide to the Director and the Area Manager a notification from the CFIA that the Digestate generated at the Site has been assessed and approved for use as a Fertilizer under the Fertilizers Act.
- (3) In addition to the notification required by Condition 8.1(2), above, the Owner shall provide to the Director and Area Manager the following information:
 - a. a copy of the complete application package submitted to the CFIA in support of the request to manufacture the Fertilizer;
 - b. the specific requirements of the CFIA that must be met for the Digestate, the Liquid Digestate and the Solid Digestate to be considered as a Fertilizer including all process monitoring, analytical, and quality assurance / quality control requirements;
 - c. a statement whether the label is a new label or if it has been re-issued as a result of a change to the incoming Organic Waste type or quality or a process change triggering a requirement for a new Fertilizer label as required by the CFIA; and
 - d. a copy of the approved Product Label.

- (4) If the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material is to be land-applied to agricultural land as a NASM, the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material, shall be managed in accordance with the NASM requirements set out in O. Regulation 267/03.
- (5) If the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material is not managed as a Fertilizer or a NASM, it is considered a processed organic waste subject to approval requirements under section 20.2 of Part II.1 of the EPA, and it shall be managed as follows:
 - a. the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material managed as a processed organic waste shall only be in accordance with the requirements of the EPA and the OWRA and any other relevant Ministry legislation;
 - b. the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material managed as a processed organic waste shall only be removed from the Site by a hauler approved by the Ministry to transport such waste or registered on the EASR, as required.
- (6) If the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material, is managed as a processed organic waste destined for further processing or Final Disposal, the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material, shall be transferred to a Ministry-approved site or a site approved/licenced to accept such waste by an equivalent jurisdiction.
- (7) If the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material is not offered for sale or is not sold as a Fertilizer in accordance with the Fertilizers Act, upon commencement of processing of the SSO containing a Human Body Waste constituent, the processed Organic Waste resulting from the anaerobic digestion out at the Site is a waste containing Human Body Waste and its transfer from the Site to a land application receiving site shall only be with a written notification to the receiving site's owner that the waste contains Human Body Waste so that the receiving site owner can determine the applicable regulatory requirements under the NMA.

8.2 End-use of the Organic Waste Slurry

- (1) The Organic Waste Slurry produced at the Site shall be Anaerobically Digested at the Site or be transferred only to one of the following types of the off-site anaerobic digestion facilities:
 - a. a waste disposal site approved to receive feedstocks containing human body waste;
 - b. a renewable energy facility approved to receive feedstocks containing human body waste; or
 - c. a RMAD, having a Nutrient Management Strategy that has been approved and is in force, to allow receipt and processing of Schedule 2B off-farm anaerobic digestion materials, as set

out in O. Regulation 267/03.

8.3 End-use of the Biogas/Renewable Natural Gas

- (1) Treated Biogas is considered to be Renewable Natural Gas when it meets the requirements for injection into the natural gas distribution infrastructure.
- (2) Treated Biogas which does not meet the required Renewable Natural Gas quality criteria shall be transferred back to the headspace of the Digesters, be re-processed in the BUS or be transferred for combustion in the Flare.
- (3) The Owner may continue to use the existing Biogas cleaning equipment and produce renewable electricity and thermal energy in an existing 1,600 kWh CHP System.

9.0 NUISANCE IMPACT CONTROL and HOUSEKEEPING

9.1 Trucks and Traffic

- (1) The Owner shall visually inspect the vehicles that have delivered the Organic Waste to the Site for evidence of leaking or dripping waste. The Owner of the vehicles that leak shall be given a written notice of the presence of the leak. The notice shall include the vehicle owner's name, the vehicle environmental compliance approval number, the type of Organic Waste delivered to the Site and the date of the delivery. A copy of the notice shall be retained at the Site and it shall be provided to the Ministry staff upon request.
- (2) The Owner shall ensure that the exterior of all vehicles delivering the Organic Waste to the Site is washed prior to their departure from the Site, as appropriate.
- (3) The Owner shall ensure that there is no queuing or parking of vehicles that are waiting to enter the Site on any roadway that is not a distinct part of the Site.
- (4) The Owner shall ensure that the vehicles transporting waste to and from the Site use the designated on-Site traffic routes.
- (5) The Owner shall ensure that all new drivers of vehicles transporting waste to and from the Site are instructed/trained on the acceptable on-Site traffic routes.
- (6) The Owner shall ensure that all trucks hauling waste are adequately covered as they leave the Site to prevent fugitive odour or dust emissions during transport.
- (7) All waste must be transported to and from the Site in accordance with the EPA and Regulation 347 and in trucks that have been approved by the Ministry or registered on the EASR, as required.
- (8) The Owner shall ensure that all drivers of trucks making deliveries to and removing waste from

the Site are made aware of the protocols to manage opening and closing of the doors in the buildings at the Site.

9.2 Litter

(1) The Owner shall prevent the escape of litter from the Site and pick up litter around the Site on a daily basis, or more frequently if necessary.

9.3 Vectors and Vermin

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

9.4 Fugitive Emissions

- (1) The Owner shall ensure that the concrete floor of the Solids Separation Building is cleaned regularly, including being washed down, as required.
- (2) The Owner shall regularly clean all equipment used to handle and process the Organic Waste at the Site, as required.
- (3) The Owner shall ensure that all on-site roads and operations/yard areas are regularly swept/wetted to prevent dust impacts off-Site.
- (4) The Owner shall take all necessary measures to minimize noise emissions to the atmosphere from the Site.
- (5) The Owner shall electronically monitor the over/under pressure relief valves on the Digesters to ensure that if they are open, it is recorded and the Owner is notified. Should any unintentional raw (untreated) Biogas be released from the over/under pressure relief values to the atmosphere, regardless of quantity, and leave the Site, the Owner shall immediately notify the Ministry in accordance with the requirements in Condition 13.0.
- (6) The Owner shall maintain the Flare at the Site and combust excess Biogas or off-specification Biogas in the instance of a process upset.

Biofilter

(7) The Owner shall ensure that the Biofilter is properly operated, inspected and maintained at all

times.

- (8) The Owner shall monitor the operation of the Biofilter through a combination of sensors, meters, physical probes or equivalent means, at frequencies as recommended by the Biofilter designer/installer or as determined by operational needs and set out in the Supporting Documentation.
- (9) As a minimum the following Biofilter operating parameters shall be monitored:
 - a. air flow rate through the Biofilter (cubic metres per second),
 - b. inlet air temperature to the Biofilter (degrees Celsius),
 - c. media temperature, at least one location (degrees Celsius),
 - d. back pressure at the Biofilter inlet (kilopascals),
 - e. inlet air relative humidity to the Biofilter (percent), and
 - f. moisture content of media (percent).
- (10) The Owner shall inspect the Biofilter as set out in the Supporting Documentation.
- (11) The Owner prepare and maintain a Manual to outline the operating procedures for the Biofilter as well as the inspection, monitoring and a maintenance program for the Biofilter as approved in this Approval. The Manual shall also include guidance for interpretation of the Biofilter monitoring results as well as for troubleshooting of system problems as recommended by the Biofilter designer/installer.
- (12) The Owner shall review the Manual from Condition 9.4(11) annually in consultation with the Biofilter designer/installer, and update it, as necessary.
- (13) The Manual from Condition 9.4(11) shall be made available to the Ministry staff for inspection.

Negative Pressure

- (14) The Owner shall maintain the entire Processing Building under adequate negative pressure as compared to the ambient atmospheric pressure at all times, excluding any time periods of Malfunction, at a magnitude sufficient enough to prevent:
 - a. a migration of the fugitive odour emissions from the Processing Building to any off-site location; or
 - b. an occurrence of an adverse effect and/or complaints from the public being affected by the

said migration of the fugitive odour emissions from the Processing Building.

Ventilation System

- (15) The Owner shall install and maintain the ventilation system in the Processing Building as set out in the Supporting Documentation.
- (16) The Owner shall ensure that the design of the ventilation system is appropriate to effectively capture odours within the Processing Building for treatment in the Biofilter so that any migration of the fugitive odour emissions from the Processing Building to any off-site location is prevented.

IonAirTech AB Odour Abatement Unit

(16) The Owner shall ensure that the IonAirTech AB Odour Abatement Unit is properly operated, inspected and maintained, and as described in theSupporting Documentation.

RTO System

(17) The Owner shall ensure that the RTO System is properly operated, inspected and maintained, and as described in the Supporting Documentation unless otherwise set out and required in the Air/Noise Approval.

Environmental Complaince Approval for Activities Set out in Section 9 of the EPA

(18) The Owner shall manage the operation, monitoring and maintenance of the the air pollution control equipment and its discharges to the atmoshere in accordance with this Approval unless otherwise set out and required in the Air/Noise Approval.

10.0 COMPLAINTS MANAGEMENT

- (1) If at any time, the Owner receives complaints regarding the operation of the Site, the Owner shall respond to these complaints according to the following procedure:
 - a. The Owner shall record each complaint in a log book or in an electronic file. The information recorded shall include the following:
 - i. name, address and the telephone number of the complainant;
 - ii. time and date of the complaint;
 - iii. waste management activities undertaken at the time of the complaint;
 - iv. general meteorological conditions including, but not limited to the ambient temperature, approximate wind speed and direction and sunny versus cloudy,

inversion versus clear and windy, etc. at the time of the complaint;

- v. details of the complaint;
- vi. actions taken to remediate the cause of the complaint; and
- vii. proposed actions to be taken to prevent reoccurrence in the future.
- b. The Owner, upon receipt of the complaint regarding the operation of the Site, shall initiate appropriate steps to determine all possible causes of the complaint and proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant.
- c. The Owner, upon receipt of the complaint regarding the operation of the Site, shall immediately notify the Area Manager.
- d. The Owner shall submit, within seven (7) days of the occurrence, a written report to the Area Manager identifying the source(s) of the complaint and details of what action was taken to rectify the problem and prevent a recurrence.

11.0 OPERATIONS MANUAL and STAFF TRAINING

11.0 Operations Manual

- (1) The Owner shall prepare an Operations Manual for use by the Site personnel. As a minimum, the Operations Manual shall contain the following:
 - a. outline the responsibilities of Site personnel;
 - b. personnel training protocols;
 - c. waste receiving and screening procedures;
 - d. waste unloading, handling, storage and processing procedures;
 - e. process monitoring procedures;
 - f. sampling and testing procedures;
 - g. Site inspections, spill, fire, upset and leakage recording procedures; and
 - h. procedure for handling complaints as described in this Approval.
- (2) A copy of the Operations Manual shall be kept at the Site, must be accessible to personnel at all

times and must be updated, as required.

11.2 Staff Training

- (1) All operators of the Site shall be trained with respect to the following:
 - a. relevant air, noise, wastewater and waste management legislation, regulations and guidelines;
 - b. major environmental concerns pertaining to the waste to be handled at the Site;
 - c. occupational health and safety concerns pertaining to the processes and wastes to be handled at the Site;
 - d. management procedures including the use and operation of Equipment for the processes and wastes to be handled at the Site;
 - e. records keeping procedures;
 - f. contingency plan and emergency response procedures;
 - g. specific written procedures for the control of adverse effects from the Site;
 - h. specific written procedures for refusal of unacceptable incoming Organic Waste loads; and
 - i. the requirements of this Approval.
- (2) The training of the operators of the Site shall also include the procedures contained in the Operations Manual.
- (3) The training of the operators of the Site shall be undertaken:
 - a. upon commencing employment at the Site;
 - b. whenever procedures are updated.

12.0 CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN

- (1) The Owner shall maintain the existing Contingency Measures and Emergency Situation Response Plan. Any updates to the Contingency Measures and Emergency Situation Response Plan shall be prepared in consultation with the Area Manager, the local Municipality and the Fire Department. The Contingency Measures and Emergency Situation Response Plan, as a minimum, shall include the following information:
 - a. emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire or any other emergency situation, including specific clean-up methods for wastes

expected to be generated from the emergency situation;

- b. odour abatement plan to propose the design and operation of the contingency measures necessary to alleviate impacts from odours emitted from the waste management activities at the Site;
- c. dust abatement plan to propose the design and operation of the contingency measure to alleviate impacts from dust originating from the waste management and vehicular activities at the Site;
- d. trigger mechanism for implementation of the abatement plans required by b. and c, above;
- e. a list of equipment and clean up materials available for dealing with the emergency situations;
- f. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Site, the Ministry's Area Office and Spills Action Centre, the local Fire Department, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response;
- g. procedures and actions to be taken should the incoming Organic Waste not meet the quality criteria specified by this Approval;
- h. procedures and actions to be taken should the outgoing Residual Waste not meet the quality criteria set out in the receiving site's Environmental Compliance Approval;
- i. procedures and actions to be taken should the processed Organic Waste fail to meet the requirements under the NMA or the Fertilizers Act; and
- j. procedures and actions to be taken should the occurrence of the substantiated complaints require the Owner to suspend the Organic Waste processing activities at the Site.
- (2) An up-to-date version of the Contingency Measures and Emergency Situation Response Plan shall be kept at the Site at all times, in a central location available to all staff, and a copy shall be submitted to the Area Manager, the local Municipality and the Fire Department, if requested.
- (3) The Contingency Measures and Emergency Situation Response Plan shall be reviewed on an annual basis and updated, if necessary. The revised version of the Contingency Measures and Emergency Situation Response Plan shall be submitted to the Area Manager, the local Municipality and the Fire Department for comments and concurrence.

13.0 EMERGENCY SITUATIONS RESPONSE AND REPORTING

(1) The Owner shall immediately take all necessary measures, as outlined in the Contingency

Measures and Emergency Situation Response Plan, to handle the emergency situations occurring at the Site.

- (2) The Owner shall ensure that the equipment and materials outlined in the Contingency Measures and Emergency Situation Response Plan are immediately available at the Site at all times and are in a good state of repair and fully operational.
- (3) The Owner shall ensure that all Site personnel are fully trained in the use of the equipment and materials outlined in the Contingency Measures and Emergency Situation Response Plan, and in the procedures to be employed in the event of an emergency.
- (4) All Spills shall be immediately reported to the Ministry's Spills Action Centre at 1-800-268-6060 and shall be recorded in the log book as to the nature and cause of the Spill, and the action taken for clean-up, correction and prevention of similar future occurrences.
- (5) Should a Spill occur at the Site, in addition to fulfilling the requirements from the EPA, the Owner shall submit to the Area 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 Site.

14.0 **RECORDS KEEPING and RETENTION**

14.1 Daily Activities

- (1) The Owner shall maintain an on-site written or digital record of activities undertaken at the Site. All measurements shall be recorded in consistent metric units of measurement. The record shall include, as a minimum, the following:
 - a. date of record;
 - b. quantity, type and source of the Organic Waste received at the Site, including any required characterization results;
 - c. quantity and type of any new Organic Waste received at the Site under the Area Manager's concurrence, including any required characterization results;
 - d. quantity and type of the Organic Waste processed at the Site, including the Waste inputed into the Digesters;
 - e. quantity and type of waste, shipped from the Site, including any required characterization results and the destinations;
 - f. amount of Digestate, Liquid Digestate and/or Solid Digestate shipped from the Site as a Fertilizer, including any required characterization results and the destinations;

- g. amount of Digestate, Liquid Digestate, Solid Digestate and the Clean-out Material shipped from the Site as a material to be managed as a NASM, including any required characterization results and the destinations;
- h. amount of Organic Waste Slurry shipped from the Site, including any required characterization results, its destination and the approval type and number;
- i. amount of the processed organic waste shipped from the Site as waste to be land-applied under an environmental compliance approval, including characterization results, the destinations and the environmental compliance approval numbers;
- j. amount of the Residual Waste and of the Rejected Waste shipped from the Site as waste to be land-applied under an environmental compliance approval or for further processing or Final Disposal, including characterization results, the destinations and the environmental compliance approval numbers of the receiving site;
- k. quantity of the Biogas generated at the Site;
- 1. quantity of the Renewable Natural Gas generated at the Site and transferred from the Site into the natural gas distribution infrastructure, including any required characterization results;
- m. duration of the Biogas combustion in the Flare;
- n. quantity and type of waste stored, at the Site, including the Organic Waste levels in the storage tanks;
- o. quantity and type of any Rejected Waste temporarily stored at the Site and shipped from the Site; and
- p. housekeeping activities, including litter collection, floor washing/cleaning activities, etc.
- (2) The Owner shall retain all records retaining to waste characterization required by this Approval for a minimum of three (3) years.

14.2 Emergency Situations

- (1) The Owner shall maintain an on-Site written or digital record of the emergency situations. The record shall include, as a minimum, the following:
 - a. the type of an emergency situation;
 - b. description of how the emergency situation was handled;
 - c. the type and amount of material spilled, if applicable;

- d. a description of how the material was cleaned up and stored, if generated; and
- e. the location and time of final disposal, if applicable.

14.3 Inspections

- (1) The Owner shall maintain an on-Site written or digital record of inspections as required by this Approval. The record shall include, as a minimum, the following:
 - a. the name and signature of person that conducted the inspection;
 - b. the date and time of the inspection;
 - c. the list of any deficiencies discovered;
 - d. the recommendations for remedial action; and
 - e. the date, time and description of actions taken.

14.4 Training

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

14.5 Sampling and Testing Records

- (1) The Owner shall establish and maintain a written or digital record of all sampling and testing activities at the Site. This record shall include, as a minimum, the following information:
 - a. waste sampled, sample collection locations and volume collected;
 - b. day and time of collection;
 - c. sample handling procedures;
 - d. parameters tested for and the resulting concentrations;
 - e. name of the laboratory facility conducting the testing; and

f. conclusions drawn with respect to the results of the monitoring and testing.

14.6 Monitoring Records

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

14.7 Complaints Response Records

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

14.8 Annual Report

- (1) By March 31st following the end of each operating year, the Owner shall prepare and submit to the Area Manager an Annual Report summarizing the operation of the Site covering the previous calendar year. This Annual Report shall include, as a minimum, the following information:
 - a. a monthly summary of the quality, type and the quantity of all incoming Organic Waste received at the Site for processing;
 - b. quantity and type of the Organic Waste of each occurence of waste receipt under the Area Manager's concurrence;
 - c. material balance for each month documenting the amount of Organic Waste present/stored and in-process at the Site;
 - d. material balance for each month documenting the amount of the Digestate, Liquid Digestate and/or Solid Digestate present/stored at the Site;
 - e. a monthly summary of the quality and the quantity of the Digestate, the Liquid Digestate or the Solid Digestate shipped off Site as a Fertilizer;
 - f. a monthly summary of the quality and the quantity of the Organic Waste Slurry shipped off Site, by each type of the receiving site;
 - g. a monthly summary of the quality and the quantity of Digestate, Liquid Digestate or Solid Digestate shipped from the Site as a material to be managed as a NASM;
 - h. a summary of the quality and the quantity of any Clean-out Material generated at the Site and shipped from the Site as a material to be managed as a NASM;
 - i. a monthly summary of the quality and the quantity of the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-out Material shipped from the Site as a processed organic waste

to be land-applied under an environmental compliance approval;

- j. monthly amount of Biogas produced at the Site;
- k. monthly amount of Renewable Natural Gas produced at the Site and transferred from the Site into the natural gas distribution infrastructure;
- 1. monthly duration of the Flare being used for Biogas or Renewable Natural Gas combustion;
- m. monthly amount of outgoing Residual Waste, Rejected Waste, the Digestate, the Liquid Digestate, the Solid Digestate, Solid Digestate or Clean-out Material shipped from the Site for further processing or Final Disposal at a Ministry-approved site;
- n. any environmental and operational problems, that could negatively impact the environment, encountered during the operation of the Site or during Site inspections and any mitigative actions taken;
- o. any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operation and monitoring programs in this regard;
- p. a summary of any complaints received and the responses made;
- q. a summary of any emergency situations, including use of over/under pressure relief valves, that have occurred at the Site and how they were handled;
- r. current amount of Financial Assurance which has been provided to the Director;
- s. a summary of all inspections and maintenance carried out at the Site;
- t. a signed statement that the Site was in compliance with the Approval; and
- u. any other information the Area Manager requires from time to time.

15.0 SITE CLOSURE

- (1) The Owner shall submit, for approval by the Director, a written Closure Plan four (4) months prior to the permanent closure of the Site. This plan must include, as a minimum, a description of the work that will be done to facilitate closure of the Site and a schedule for completion of that work.
- (2) Within ten (10) days after closure of the Site, the Owner must notify the Director, in writing, that the Site is closed and that the Closure Plan has been implemented.

Schedule 1

- Application for a Certificate of Approval for a Waste Disposal Site dated April 28, 2009 and signed by Roger Tiessen, Seacliff Energy Inc., including the report entitled "Design & Operations Report", the report entitled "Stormwater Management Report" prepared by N.J. Peralta Engineering Ltd., the drawing dated Feb 1, 2007 entitled "Site Layout", the drawing dated Feb 1, 2007 entitled "Site Grading Plan" and the drawing dated Feb 1, 2007 entitled "Underground Drainage and Site Grading Details".
- 2. Facsimile transmission dated May 11, 2009 to Anne Cameron, Ontario Ministry of the Environment, from Dennis Dick, Seacliff Energy Inc. including the information on the adjacent land owner notification.
- 3. Facsimile transmission dated October 23, 2009 to Margaret Wojcik, Ontario Ministry of the Environment, from Dennis Dick, Seacliff Energy Inc. including additional supporting information on the proposal.
- 4. Report entitled "Geotechnical Investigation", dated October 25, 2007, prepared by N.J. Peralta Engineering Ltd.
- 5. E-mails dated October 27, 2009 (5:12 p.m.), October 29, 2009 (10:39 p.m.), October 30, 2009 (10:16 a.m.), October 30, 2009 (10:37 a.m.), October 30, 2009 (10:49 a.m.), October 30, 2009 (1:55 p.m.) and October 30, 2009 (3:13 p.m.) from Dennis Dick, Seacliff Energy Inc. to Margaret Wojcik, Ontario Ministry of the Environment, providing additional information on the proposal, an attachment consisting of the drawing dated June 29, 2009 entitled "Seacliff Energy New Driveway and Entrance" and agreement to new waste receipt hours.
- 6. Letter dated May 9 2011 from Dennis Dick, Seacliff Energy Ltd., to Director, Environmental Assessment and Approvals Branch, Ontario Ministry of the Environment, providing the estimate for the financial assurance for the site.
- 7. Application for a Certificate of Approval for a Waste Disposal Site dated April 11, 2011 and signed by Dennis Dick, Seacliff Energy Ltd., including the cover letter dated April 11, 2011 from Dennis Dick, Seacliff Energy Ltd.
- 8. E-mail dated May 4, 2011 from Dennis Dick, Seacliff Energy Ltd. to Julius Arscott, Ontario Ministry of the Environment, with the Certificate of Incorporation.
- 9. Letter dated May 9 2011 from Dennis Dick, Seacliff Energy Ltd., to Director, Environmental Assessment and Approvals Branch, Ontario Ministry of the Environment, providing the information related to the application for a fertilizer label to the Canadian Food Inspection Agency and the registration letter and accepted fertilizer label.
- 10. Application for this Environmental Compliance Approval, dated January 22, 2014, signed by

Dennis Dick, Seacliff Energy Ltd. and including the following attachments entitled:

- a. Proof of legal name
- b. Detailed Project and Process Description
- c. Pre-application Consultation Record
- d. Site Plan
- e. Scaled Area location
- f. Proof of Compliance with EAA requirements
- g. Proof of Consultation/Notification
- h. Financial Assurance Estimate
- i. Consent of Landowner
- j. Municipal Zoning Confirmation Letter
- k. Zoning Map
- 1. Design and Operations Report
- m. Copy of Notification to Adjacent Landowners
- n. Explanation of Confidentiality
- 11. E-mail dated September 11, 2015 (6:14 p.m.) from Dennis Dick, Seacliff Energy Ltd., to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change providing additional information on the proposal, withdrawing compost leachate receipt and processing from the application and including following attachments entitled:
 - a. "Seacliff sample letter.docx"
 - b. "SEC addendum to amendment.docx"
 - c. "IonAirtech info.pdf"
- 12. E-mail dated January 20, 2016 (9:27 a.m.) from Dennis Dick, Seacliff Energy Ltd., to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change providing additional information on the proposal and including following attachments entitled:

- a. "MoE amendment responses letter 16Jan 15(1).pdf"
- b. "Seacliff brochure.docx"
- c. "Seacliff odour assessment quote.pdf"
- 13. E-mail dated March 26, 2016 (3:33 p.m.) from Dennis Dick, Seacliff Energy Ltd., to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change providing additional information on the proposal and including following attachments entitled:
 - a. "Seacliff Energy MOECC amendment responses March 26, 2016.pdf"
 - b. "1 SEC Am Pro door locations.pdf"
 - c. "2 SEC AmPro pick up point.pdf"
 - d. "3 SEC AmPro receiving pit plan.pdf"
 - e. "4 SEC AmPro air intake.pdf"
 - f. "5 SEC AmPro Residual Bin Location.pdf"
 - g. "6 SEC AmPro SSO Receiving Area.pdf"
 - h. "7 SEC AmPro Waste Water Sumps.pdf"
 - i. "8 SEC AmPro Dover Sanitation quote.pdf"
 - j. "9 SEC AmPro Cornerstone brochure.pdf"
 - k. "10 SEC AmPro Windfall Farms quote.pdf"
 - 1. "11 SEC AmPro Financial Assurance Summary.pdf"
- 14. E-mail dated June 24, 2016 (3:17 p.m.) from Dennis Dick, Seacliff Energy Ltd., to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change providing additional information on the proposal and including following attachments entitled:
 - a. "MOECC responses June 24, 2016.pdf"
 - b. "MOECC response 1 June24 Calvin.pdf"
 - c. "MOECC response 2 logs.pdf"

- d. "MOECC response 3 duct work plan.pdf"
- e. "MOECC response 4 soaker hose.pdf"
- 15. E-mail dated July 18, 2016 (4:15 p.m.) from Dennis Dick, Seacliff Energy Ltd., to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, with confirmation that the service area for source separated organics is the province of Ontario.
- 16. E-mail dated August 5, 2016 (10:39 a.m.) from Dennis Dick, Seacliff Energy Ltd., to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, including an attachment entitled "Calvin Pride letter Aug 4, 2014.pdf" providing additional information on the design of the proposed ventilation modifications.
- 17. E-mail dated September 2, 2016 (10:06 a.m.) from Dennis Dick, Seacliff Energy Ltd., to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, with confirmation that the ventilation system will be designed as per recommendations of their technical consultant.
- 18. Application for Environmental Compliance Approval dated January 26, 2018, signed by Dennis Dick, Seacliff Energy Corp, and the supporting documentation.
- 19. Email dated August 16, 2018, (3:38 p.m.) from from Dennis Dick, Seacliff Energy Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- 20. Letter dated September 21, 2018 from Tej Gidda, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- 21. E-mail dated October 24, 2018 (9:29 a.m.) from Aaron Baechler, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- 22. E-mail dated October 31, 2018 (6:12 p.m.) from Aaron Baechler, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- 23. E-mail dated December 4, 2018 (3:54 p.m.) from Aaron Baechler, GHD, to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- 24. E-mail dated May 24, 2023 (2:06 p.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- 25. E-mail dated December 4, 2023 (12:11 p.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on

the proposal.

- 26. Application for an Environmental Compliance Approval dated December 18, 2023 and signed by Jason Moretto, Envest Corp, including the following attachments:
 - a. Proof of legal name & certificate of incorporation.pdf
 - b. Detailed project and process description.pdf
 - c. Site plan.pdf
 - d. Scaled area plan.pdf
 - e. Proof of compliance with EAA EA assessment.pdf
 - f. Neighbourhood meeting report.pdf
 - g. Financial assurance calculation.pdf
 - h. Landowner consent letter.pdf
 - i. Zoning confirmation letter.pdf
 - j. Zoning map.pdf
 - k. Seacliff Energy Corp. Design and Operations Report.pdf
 - 1. Stormwater management review & report.pdf
 - m. Caldwell letter of support 2009.pdf
 - n. Confidentiality explanation letter (signed).pdf
 - o. Mandatory neighbourhood notifications.pdf
 - p. Cover letter SEC ECA application resubmission (Executed).pdf;
 - q. ECA #4259-7X7K3U amendment application resubmission (Ministry Reference # 1000191694) .msg;
 - r. Email from Margaret Wojcik.pdf;
 - s. SEC ECA amendment application (2023) (002) (Executed).pdf
- 27. E-mail dated December 4, 2023 (12:11 p.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- 28. E-mail dated June 17, 2024 (9:37 a.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- 29. E-mail dated July 3, 2024 (2:48 p.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.
- E-mail dated July 18, 2024 (5:18 p.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing draft ECA comments and additional clarification on the proposal.
- 31. E-mail dated August 1, 2024 (4:27 p.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on

the organic slurry management and storage.

- 32. E-mail dated August 28, 2024 (3:04 p.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the organic slurry management and storage.
- 33. E-mail dated September 16, 2024 (8:35 a.m.) from Faraz Ahmad, Envest Corp., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional clarification on the proposal and draft approval comments.

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

GENERAL

Conditions 1.1, 1.4, 1.5, 1.6. 1.9 and 1.11 are included to clarify the legal rights and responsibilities of the Owner.

Conditions 1.2 and 1.3 are included to ensure that the Site is build and operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.

Condition 1.7(1) is included to ensure that the Site is operated under the corporate name which appears on the application form submitted for this approval and to ensure that the Director is informed of any changes.

Condition 1.7(3) is included to restrict potential transfer or encumbrance of the Site 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.

Condition 1.8 is included to ensure that the appropriate Ministry staff has ready access to the operations of the Site which are approved under this Approval. 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.

Condition 1.10 is included to ensure that sufficient funds are available to the Ministry to clean up the Site in the event that the Owner is unable or unwilling to do so.

SIGNS and SITE SECURITY

Condition 2.0 is included to ensure that the Site's users, operators and the public are fully aware of important information and restrictions related to the operation of the Site. Condition 2.0 is also included to ensure that the Site is sufficiently secured, supervised and operated by properly Trained Personnel and to ensure controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no Site personnel is on duty.

SERVICE AREA, APPROVED WASTE TYPES and RATES

Condition 3.0 is included to specify the approved Wastes receipt rate, the approved Wastes types and the service area from which the Wastes may be accepted at the Site based on the Owner's application and supporting documentation.

SITE OPERATIONS

Condition 4.1 is included to specify the hours of operation for the Site to ensure that the hours of Site's operation do not result in an Adverse Effect or a hazard to the natural environment or any person.

Condition 4.2 is included to ensure that only the approved the Waste types are accepted and handled/processed at the Site.

Conditions 4.3 through 4.11 are included to ensure that waste storage and management, run-off management and the discharges of emissions to the atmosphere are undertaken in done in a way which does not result in an Adverse Effect or a hazard to the environment or any person and are in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.

Condition 4.4 is also included to specify the amounts of waste approved to be stored at the Site for the purpose of calculating the Financial Assurance requirements for the Site.

SITE/EQUIPMENT INSPECTION and MAINTENANCE

Condition 5.0 is included to require the Site, including the Equipment, to be inspected and the Equipment be maintained thoroughly and on a regular basis to ensure that the operations at the Site are undertaken in a manner which does not result in an Adverse Effect or a hazard to the health and safety of the environment or any person.

WASTE QUALITY CRITERIA

Conditions 6.1 and 6.2 are included to identify the parameters to be tested to ensure that the incoming Organic Waste feedstocks are appropriate for Anaerobic Digestion approved under this Approval.

Conditions 6.1 and Condition 6.3 are included to identify the quality criteria for the Organic Waste Slurry transferred from the Site as a feedstock for off-Site anaerobic digestions facilities.

Conditions 6.1 and 6.4 are included to identify the parameters to be tested for when the Digestate, the Liquid Digestate, the Solid Digestate or the Clean-Out Material is destined for land application following the processing at the Site.

Conditions 6.1 and 6.5 are included to identify the requirements for management of the Residual Waste generated at the Site.

Conditions 6.1 and 6.6 are included to identify the Renewable Natural Gas quality criteria required by the owner and the operator of the natural gas distribution infrastructure.

TESTING and MONITORING

Conditions 7.1 and 7.2 are included to ensure that the Owner accepts and processes only the waste types that are approved in this Approval and that those wastes that are appropriate for Anaerobic Digestion approved under this Approval.

Conditions 7.1 and 7.3 are included to ensure that the Owner regularly tests the incoming Organic Waste received for processing at the Site to verify its compatibility with the proposed processing and the proposed final end-use of the Digestate and the outgoing Digestate, the Liquid Digestate and the Solid Digestate to verify its compatibility with the proposed final end-use.

Conditions 7.1 and 7.4 are included to ensure that the Owner regularly tests the Clean-Out Material generated at the Site to verify its compatibility with the proposed final disposal destination.

Condition 7.5 is included to specify the process monitoring parameters required for a properly functioning operation as per the consensus in the industry and the Ministry's requirements. Condition 7.5 is also included to require the BUS monitoring required for a properly functioning operation as per the consensus in the industry's requirements and to

END-USE of OUTPUTS

Condition 8.0 is included to ensure that all outputs from management of waste at the Site are properly managed, processed and disposed of in accordance with the Ministry's regulatory requirements and in a manner that protects the health and safety of the public and the environment.

NUISANCE IMPACT CONTROL and HOUSEKEEPING

Condition 9.0 is included to ensure that the Site is operated and maintained in an environmentally acceptable manner which does not result in a negative impact on the natural environment or any person.

Condition 9.(17) is also included to set out the requirements for management of the emissions to the atmosphere and the air pollution control equipment and systems until the Ministry issues the Air/Noise Approval.

COMPLAINTS MANAGEMENT

Condition 10.0 is included to require the Owner to respond to any environmental complaints resulting from the operations at the Site appropriately and in a timely manner and that appropriate actions are taken to prevent any further incidents that may cause complaints in the future.

OPERATIONS MANUAL and STAFF TRAINING

Condition 11.0 is included to ensure that personnel employed at the Site are fully aware and properly trained on the requirements and restrictions related to Site operations under this Approval.

CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN

Condition 12.0 is included to ensure that the Owner is prepared and properly equipped to take action in the event of an emergency situation.

EMERGENCY SITUATIONS RESPONSE and REPORTING

Condition 13.0 is included to require further spill notification to the Ministry, in addition to the requirements already listed in Part X of the EPA.

RECORDS KEEPING and RETENTION

Condition 14.0 is included to ensure that detailed records of Site activities, inspections, monitoring and upsets are recorded and maintained for inspection and information purposes.

SITE CLOSURE

Condition 15.0 is included to ensure that final closure of the Site is completed in accordance with Ministry's standards.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 4259-7X7K3U issued on February 27, 2019, as amended.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

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

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

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;

6. The municipality or municipalities within which the project is to be engaged in.

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

This Notice must be served upon:

Registrar* Ontario Land Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5 OLT.Registrar@ontario.ca The Director appointed for the purposes of Part II.1 of the *Environmental Protection Act* Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.oltt.gov.on.ca

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

and

DATED AT TORONTO this 24th day of October, 2024

Hat 1

Mohsen Keyvani, P.Eng. Director appointed for the purposes of Part II.1 of the *Environmental Protection Act*

MW/

- c: Area Manager, MECP Windsor
- c: District Manager, MECP Sarnia Roger Tiessen, Seacliff Energy Corp. Faraz Ahmad, P. Eng., Envest Corp.