

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 1442-7RRKQL Issue Date: September 18, 2023

StormFisher Environmental Ltd. 1087 Green Valley Rd London, Ontario N6N 1E4

Site Location: 1087 Green Valley Rd Part of Lot 13, Concession 3, London City, County of Middlesex

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 4.27-hectare anaerobic digestion facility, to process 225,000 tonnes of Organic Feedstock per year to generate a total power of 2,850 kilowatts of electricity, 3,020 kilowatts of thermal power and 3,600 Nm³ /hour of biogas to renewable natural gas, consisting of the following processes and support units:

- 1. Receipt, pre-treatment, transfer and temporary storage of Organic Feedstock;
- 2. Anaerobic treatment of the pre-treated and mixed Organic Feedstock, including the hydrolysis in the two (2) thermal acidification reaction tank and the anaerobic digestion in the four (4) anaerobic digesters and in one (1) Digestate Holding Tank;
- 3. Electricity and thermal energy generation from the combustion of biogas produced by the anaerobic treatment of the Organic Feedstock;
- 4. Production of renewable natural gas through processing of biogas produced by the anaerobic treatment of Organic Feedstock;
- 5. Production of fertilizers from the Digestate produced by the anaerobic treatment of the Organic Feedstock;

including the Equipment, the Works, and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to 225,000 tonnes per year of Organic Feedstock, exhausting air emissions to the atmosphere as described in the ESDM Report and associated addenda

included in Schedule "A".

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

Part One: Definitions

"ACB list" means the document entitled "Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", as amended from time to time and published by the Ministry and available on a Government website;

"Acceptable Point of Impingement Concentration" means a concentration accepted by the Ministry as not likely to cause an adverse effect for a Compound of Concern that,

- a. is not identified in the ACB List, or
- b. is identified in the ACB List as belonging to the category "Benchmark 2" and has a concentration at a Point of Impingement that exceeds the concentration set out for the contaminant in that document

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

"Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 and Appendix A of the Basic Comprehensive User Guide, by Weidong Li, Pinchin Ltd. and dated August 22, 2022, submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility, as updated in accordance with condition 25 of this Approval;

"Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarizing the results of the Acoustic Assessment Report, as updated in accordance with condition 25 of this Approval ;

"Approval" means this entire Environmental Compliance Approval and any Schedules to it;

"**Basic Comprehensive User Guide**" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;

"**Biofilter**" means the biofilter(s) as described in the ESDM Report and the Dust and Odour Management Plan;

"BOD5" means five-day biological oxygen demand measured in an unfiltered wastewater sample and includes carbonaceous and nitrogenous oxygen demand;

"CBOD5" means five-day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered water sample;

"**Company**" means StormFisher Environmental Ltd. that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;

"**Compound of Concern**" means a contaminant that is described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged from the Facility in an amount that is not negligible;

"**Description Section**" means the section on page one of this Approval describing the Company 's operations and the Equipment located at the Facility and specifying the Facility Production Limit for the Facility;

"Digestate" means the effluent from the anaerobic digestion process;

"**Director**" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;

"**District Manager**" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;

"**Dust and Odour Management Plan**" means the report entitled <u>Dust and Odour Management Plan</u>, dated August 25, 2022, and prepared by the Company, as amended;

"Emergency Response and Contingency Plan" means the report, prepared by the Company, and amended to this Approval as Item (11) of Schedule "A";

"**Emission Summary Table**" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;

"Environmental Assessment Act" means the *Environmental Assessment Act*, R.S.O. 1990, c.E.18, as amended;

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

"Equipment with Specific Operational Limits" means the equipment described in Schedule "B" and any Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other Equipment that is specifically referenced in any published Ministry document that outlines specific operational guidance that must be considered by the Director in issuing an Approval;

"Equipment" means equipment or processes described in the ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;

"ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;

"Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;

"Exhausted" means the capacity of the activated carbon to adsorb contaminant emissions is reached, and the activated carbon filter unit is no longer able to effectively reduce emissions;

"Existing Works" means those portions of the Works included in the Approval that have been constructed previously;

"**Facility Production Limit**" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;

"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;

"**Highest Ranking Person**" means the highest ranking person regularly present at the Facility who has management responsibilities relating to the Facility;

"Log" means a document or electronic record that contains a record of each change that is required to be made to the ESDM Report and Acoustic Assessment Report, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a Point of Impingement and all changes to information associated with a Modification to the Facility that satisfies condition 16;

"Loss of Negative Pressure" means a continuous five-minute period in which either the Reception Hall or the Digestate Management Building is not in a state of negative pressure, as determined by the methods permitted in this Approval;

"**Manager**" means the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, who has been appointed under section 5 of the EPA for the purposes of the section 11(1)2 of O. Reg. 419/05, or any other person who represents and carries out the duties of the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, as those duties relate to the conditions of this Approval ;

"Minister" means the Minister of the Environment, Conservation and Parks or such other member of the

Executive Council as may be assigned the administration of the EPA under the Executive Council Act ;

"Ministry" means the ministry of the Minister;

"**Modification**" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the Facility that may discharge or alter the rate or manner of discharge of a Compound of Concern to the air; or discharge or alter noise or vibration emissions from the Facility;

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

"Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers;

"O. Reg. 419/05" means Ontario Regulation 419/05, Air Pollution- Local Air Quality, as amended;

"Odour Control System" means the Biofilter and activated carbon filters, exhausting to a single stack, in conjunction with the ColdOxTM (UV, excess ozone, and photochemical oxidation system supported by catalysts in series with activated carbon) and DEOTM (catalyst-based system), exhausting to a secondary stack, used to reduce air emissions from the Equipment as described in the ESDM Report and the Dust and Odour Management Plan;

"**Organic Feedstock**" means materials limited to solid or liquid municipal and industrial waste derived from plants or animals, listed in condition 34 of this Approval, and all readily biodegradable;

"Organic Matter" means organic matter having carbon content expressed as equivalent methane;

"**Original ESDM Report**" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by Andrew Chan, Pinchin Ltd. and dated August 23, 2022 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;

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

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

"Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;

"Point of Reception" means Point of Reception as defined by Publication NPC-300;

"**Pre-Test Plan**" means a plan for the Source Testing including the information required in section 5 of the Source Testing Code;

"Procedure Document" means Ministry guidance document titled "Procedure for Preparing an

Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;

"**Processed Material**" means the Organic Feedstock that has undergone processing as approved under this Approval but has not met the criteria to be considered a Fertilizer and therefore is considered a processed organic waste, as defined in Reg. 347;

"**Processes with Significant Environmental Aspects**" means the Equipment which, during regular operation, would discharge a Compound of Concern into the air in an amount which is not considered as negligible in accordance with section 26(1)4 of O. Reg. 419/05 and the Procedure Document;

"**Proposed Works**" means those portions of the Works included in the Approval that are under construction or to be constructed;

"**Provincial Officer**" means any person designated in writing by the Minister as 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;

"**Publication NPC-207**" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the Ministry , August 1978, as amended;

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

"**Publication NPC-300**" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources - Approval and Planning, Publication NPC-300", August 2013, as amended;

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

"**Rejected Waste**" means the incoming Organic Feedstock received at the Site that does not meet the incoming Organic Feedstock quality criteria set out in this Approval;

"**Residual Waste**" means solid waste, limited to waste resulting from the Organic Feedstock processing activities at the Site and to the waste resulting from housekeeping activities required by this Approval;

"Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:

- a. Schedule "A" Supporting Documentation
- b. Schedule "B" Equipment with Specific Operational Limits
- c. Schedule "C" Test Contaminants
- d. Schedule "D" Source Testing Procedure
- e. Schedule "E" Procedure to calculate and record the 10-minute average concentration of

odour at the Point of Impingement and the most impacted Sensitive Receptor

- f. Schedule "F" Continuous Monitoring System Requirements
- g. Schedule "G" Odour Control Monitoring Parameters

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

"Sensitive Receptor" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from discharges from the Facility to the atmosphere, including one or a combination of:

- a. private residences or public facilities where people sleep (e.g.: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.),
- b. institutional facilities (e.g.: schools, churches, community centres, day care centres, recreational centres, etc.),
- c. outdoor public recreational areas (e.g.: trailer parks, play grounds, picnic areas, etc.), and
- d. other outdoor public areas where there are continuous human activities (e.g.: commercial plazas and office buildings).

"Site" means the StormFisher Environmental Ltd. property at 1087 Green Valley Road in the City of London, Ontario on which the Facility is located;

"Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;

"**Source Testing**" means site-specific sampling and testing to measure emissions resulting from operating the Targeted Sources under operating conditions that will derive an emission rate that, for the relevant averaging period of the contaminant, is at least as high as the maximum emission rate that the source of contaminant is reasonably capable of, or a rate approved by the Manager within the approved operating range of the Targeted Sources which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;

"SRM" means waste that includes, at a minimum, but is not limited to, (a) the skull, brain, trigeminal ganglia, eyes, tonsils, spinal cord and dorsal root ganglia of cattle aged 30 months or older; and (b) the distal ileum of cattle of all ages. SRM may also include other additional materials as defined by the federal <u>Health of Animals Regulations C.R.C. c. 296</u>, as amended;

"**Substantiated Complaint**" means a complaint received either by the Company or the District Manager that has been confirmed by staff of the Ministry the cause of which is attributed to the Company 's activities at the Facility ;

"Targeted Sources" means B-1 and RHB-OCS;

"Test Contaminants" means those contaminants set out in Schedule "C" of this Approval ;

"Toxicologist" means a qualified professional currently active in the field of risk assessment and

toxicology that has a combination of formal university education, training and experience necessary to assess contaminants;

"**Trained Personnel**" means a person or people knowledgeable in the following through instruction and/or practice:

- 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 waste loads; and
- i. the requirements of this Approval.

"Works" means the approved sewage works, and includes Proposed Works and Existing Works;

"Written Summary Form" means the electronic questionnaire form, available on the Ministry website, and supporting documentation, that documents the activities undertaken at the Facility in the previous calendar year;

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

TERMS AND CONDITIONS

Part Two: Terms and Conditions

Section One: GENERAL

- <u>1.</u> <u>Compliance</u>
- 1.1 The Company shall ensure compliance with all the conditions of this Approval and shall ensure that any person authorized to carry out work on or operate any aspect of the Site, including any Works, is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 1.2 Any person authorized to carry out work on or operate any aspect of the Site shall comply with the conditions of this Approval.

<u>2.</u> <u>In Accordance</u>

- 2.1 Except as otherwise provided for in this Approval, the Site shall be designed, developed, built, operated and maintained in accordance with the Application for this ECA, dated August 24, 2017, and the supporting documentation listed in Schedule "A".
- 2.2 The Company shall prepare, maintain and retain on Site, a set of as-built drawings, complete with modification log, showing the Facility, the Works and bearing the stamp of a Professional Engineer.
- 2.3 a. Construction and installation of the aspects of the Site described in Items 27, 31 and 32 of Schedule "A" must be completed within five (5) years of the later of:
 - i. the date this Approval is issued; or
 - ii. if there is a hearing or other litigation in respect of the issuance of this Approval, the date that this hearing or litigation is disposed of, including all appeals.
 - b. This Approval ceases to apply in respect of the aspects of the Site noted above that have not been constructed or installed before the later of the dates identified in Condition 2.3(a) above.
- <u>3.</u> Interpretation
- 3.1 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.
- 3.2 Where there is a conflict between the applications and a provision in any documents listed in Schedule "A", the applications shall take precedence, unless it is clear that the purpose of the document was to amend the applications and that the Ministry approved the amendment.
- 3.3 Where there is a conflict between any two documents listed in Schedule "A", other than the applications, the document bearing the most recent date shall take precedence.
- 3.4 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.
- 4. Other Legal Obligations
- 4.1 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 Company to furnish any further information related to compliance with this Approval.
- 5. <u>Adverse Effects</u>
- 5.1 The Site shall be constructed, operated and maintained in a manner which ensures the health and safety of all persons and prevents adverse effects on the natural environment or on any persons.
- 5.2 The Company 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 accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
- 5.3 Despite a Company or any other person fulfilling any obligations imposed by this Approval, the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or emission that caused the adverse effect to the natural environment or impairment of water quality.
- 5.4 If at any time odours, pests, litter, dust, noise or other such negative effects are generated at this Site and cause an adverse effect, the Company shall take immediate appropriate remedial action that may be necessary to alleviate the adverse effect, including suspension of all waste management activities if necessary.
- 6. Change of Ownership
- 6.1 The Company shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any changes:
 - a. the ownership of the Site;
 - b. the operator of the Site;
 - c. the address of the Company;
 - d. the partners, where the Company is or at any time becomes a partnership and a copy of the most recent declaration filed under the *Business Names Act* R.S.O. 1990, c. B.17, as amended, shall be included in the notification;
 - e. the name of the corporation where the Company is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed

under the Corporations Information Act, R.S.O. 1990, c. C.39, as amended, shall be included in

the notification.

6.2 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 and sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out. In the event of any change in ownership of the Site, the Company shall notify the successor of and provide the successor with a copy of this Approval, and the Company shall provide a copy of the notification to the District Manager and the Director.

7. Inspections by the Ministry

- 7.1 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 company; 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.

All of the foregoing rights of a Provincial Officer shall be subject to the limitations set out in the statutes above.

8. Information and Record Retention

- 8.1 Any information requested, by the Ministry, concerning the Site and its operation under this Approval, including but not limited to any records required to be kept by this Approval shall be provided to the Ministry, upon request, in a timely manner.
- 8.2 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.
- 8.3 The Company shall ensure that a copy of this Approval in its entirety, including all notices of amendments and the documentation listed in the Schedules of this Approval, are retained at the Site at all time.
- 8.4 All records required by the conditions of this Approval must be retained on Site for a minimum period of five (5) years from the date of their creation.
- 8.5 Any information relating to this Approval and contained in Ministry files may be made available to the public in accordance with the provisions of the *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, C. F-31.
- <u>9.</u> <u>Spills</u>
- 9.1 All Spills, as defined in the EPA, shall be immediately reported to the Ministry's Spills Action Centre at 1-800-268-6060 and shall be recorded in the log book or electronic log as to the nature and cause of the spill, and the action taken for clean-up, correction and prevention of similar future occurrences.
- 9.2 Should a Spill, as defined in the EPA, occur at the Site, in addition to fulfilling the requirements from the EPA, the Company shall submit to the District Manager a written report within five (5) calendar days outlining the nature of the Spill, remedial measure taken and the measures taken to prevent future occurrences at the Site.
- <u>10.</u> <u>Complaint Response Procedures</u>
- 10.1 The Company shall establish a third party call centre that will be available 24/7/365 to receive complaints from neighbours of the Site and provide notification to the Ministry. The telephone number of the third party call centre shall be posted on the Site sign. The District Manager may revoke this condition from this Approval at any time during operation if minimal complaints are received.
- 10.2 If at any time, the Company or the Ministry receives a complaint or the Company or the Provincial Officer detects an emission from the Site (emission event), the Company shall record all relevant information in the computerized tracking system and shall respond to the complaint/ emission event according to the following procedure:

Step 1: Record of Complaint/Emission Event

a. The Company shall ensure that each complaint/emission event is recorded in the

computerized tracking system and each record shall include the following:

- i. name, address and the telephone number of the complainant, if known;
- ii. time and date of the complaint/emission event;
- iii. details of the complaint/emission event; and
- b. After the complaint/emission event has been recorded in the computerized tracking system, the Company or third-party call centre, shall as soon as practically possible, report to the Provincial Officer or the Spills Action Centre by phone, the receipt of the complaint or the occurrence of the emission event.
- c. The Company may compile multiple complaints regarding the same occurrence during a 4-hour period and, after the initial notification as required by Step 1b. above is performed, report by email or phone to the Provincial Officer or the Spills Action Centre of the complaints by no later than 72 hours after the initial complaint.

Step 2: Investigation and Handling of Complaint/Emission Event

- d. The Company shall, as soon as practically possible after the receipt of the complaint or the occurrence of the emission event, initiate investigation of the complaint/emission event. As a minimum, the investigation shall include the following:
 - i. determination of the activities being undertaken at the Site at the time of the complaint/emission event;
 - ii. meteorological conditions including, but not limited to the ambient temperature, approximate wind speed and its direction;
 - iii. determination if the complaint/emission event is attributed to activities being undertaken at the Site and if so, the possible cause(s) of the complaint/emission event;
 - iv. determination of the remedial action(s), including but not be limited to those included in the Emergency Response and the Contingency Plan required by condition 47.1 of this Approval, to address the cause(s) of the complaint/emission event, and the schedule for the implementation of the necessary remedial action(s).
- e. Upon completion of the investigation of the complaint/emission event, but no later than thirty (30) business days from the occurrence of the complaint, the Company shall forward a formal response to the complainant, if known and relevant, and to the District Manager, or assigned provincial MECP officer.

- f. The response shall include the results of the investigation of the complaint/emission event, the action(s) taken or planned to be taken to address the cause(s) of the complaint/emission event and if any follow-up response(s) would be provided.
- g. If the complaint is a Substantiated Complaint and the emission event is attributed to the operations at the Site, the Company shall take appropriate steps and actions to remediate the cause(s) of the Substantiated Complaint or the emission event in accordance with the proposed schedule or as otherwise instructed by the District Manager.
- h. Upon successful resolution of the Substantiated Complaint / emission event, the Company shall, within five (5) business days, submit a report to the District Manager on that Substantiated Complaint / emission event and all remedial actions taken and all proposed actions to prevent a re-occurrence of the Substantiated Complaint / emission event in the future.

Step 3: Suspension of Operation

i. If the cause(s) of the Substantiated Complaint / emission event cannot be addressed to the satisfaction of the District Manager or the District Manager deems the additional remedial measures taken to be unsuitable, insufficient or ineffective, the District Manager may direct the Company, in writing, to take further measures to address the noted cause(s) of the Substantiated Complaint / emission event, pursuant to section 20.2 of the EPA, requiring a reduction in the receipt of the Organic Feedstock, cessation of the receipt of the Organic Feedstock and/or suspension of operations at the Site in accordance with the Emergency Response and Contingency Plan.

<u>11.</u> Financial Assurance

- 11.1 Within sixty (60) days issuance of this Approval, the Company shall submit Financial Assurance as defined in Section 131 of the Act, in the amount of CAD 782,821.00. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the analysis, transportation, monitoring and disposal of the total approved quantity of waste on the Site, Site decommissioning and clean-up.
- 11.2 Commencing on March 31, 2028 and at intervals of five (5) years thereafter, the Company shall submit to the Director, a re-evaluation of the amount of Financial Assurance to implement the actions required under condition 11.1. 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 annual reports. The Financial Assurance must be submitted to the Director within twenty (20) days of written acceptance of the re-evaluation by the Director.
- 11.3 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.

<u>12.</u> <u>Reporting Requirements</u>

- 12.1 By March 31st following the end of each operating year, the Company shall prepare and submit to the Director and District 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 and the quantity of all incoming and outgoing wastes, including analytical data required to characterize the waste;
 - b. material balance for each month documenting the amount of wastes stored at the Site;
 - c. a monthly summary of the quality and the quantity of the Fertilizer shipped off the Site;
 - d. 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;
 - e. any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operation and monitoring programs in this regard;
 - f. a summary of any complaints received and the responses made;
 - g. a summary of any emergency situations that have occurred at the Site and how they were handled;
 - h. an update on the amount of financial assurance which has been provided to the Director;
 - i. a summary of all specialized loads received at the Site with an excess concentration of either cobalt, selenium and molybdenum, for the purposes in aiding the anaerobic digestion of Organic Feedstock and their effectiveness in the digestion process, and a discussion on any subsequent impacts to Digestate quality;
 - j. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
 - k. a summary of all effluent monitoring results undertaken in the reporting period;
 - 1. a summary of all discharges of contaminated stormwater and spills to the municipal sanitary sewer including date and volume for each event;
 - m. any other information the District Manager requires from time to time.

13. Public Liaison Committee

- 13.1 The requirements for the Public Liaison Committee detailed in conditions 13.2 to 13.7 below are not in effect until the following occurs:
 - a. the District Manager determines that repeated Substantiated Complaints has demonstrated the need to re-initiate the Public Liaison Committee, and
 - b. the Company is notified in writing by the District Manager that conditions 13.2 to 13.7 below are in effect from the date.
- 13.2 The Company shall prepare Terms of Reference for the Public Liaison Committee ("ToR PLC") and submit it to the District Manager for approval. The ToR PLC shall be prepared in consultation with the interested members of the affected public and the Company shall invite representation from the following groups to participate on the preparation of the ToR PLC:
 - a. the City of London;
 - b. home owners and businesses within 1,000 metres of the Site.
- 13.3 The ToR PLC shall be amended from time to time according to appropriate amending procedures identified within the content of the ToR PLC. Any amendment to the ToR PLC must be approved by the District Manager prior to its implementation.
- 13.4 The Company shall take all reasonable steps to establish, maintain and participate in a Public Liaison Committee ("PLC"), which shall serve as a forum for dissemination, consultation, review and exchange of information regarding the operation of the Site, including environmental monitoring, maintenance, complaint resolution, and new approvals or amendments to existing approvals related to the operation of this Site.
- 13.5 The number of representatives from each group shall be as specified in the ToR PLC approved by the District Manager.
- 13.6 No later than ninety (90) days from the District Manager's approval, from paragraph 3 above, the Company shall submit to the District Manager a written report that details steps to be taken by the Company to establish, maintain and participate in a PLC. This report shall include the identification of each of the representatives that have been invited to participate in the PLC.
- 13.7 Conditions 13.1 through 13.7 shall expire three (3) years after the commissioning of the fourth digester tank unless the need for the PLC is initiated pursuant to condition 13.1 above.
- 14. Operation and Maintenance Manuals Air and Noise, Waste, and Industrial Sewage Works
- 14.1 The Company shall prepare and make available to all staff, no later than three (3) months from

the date of this Approval, a complete set of manuals, operating procedures and maintenance programs for the Facility, including all Processes with Significant Environmental Aspects and the Works, which shall specify and include, as a minimum:

Staff Training and Responsibilities

- a. outline the responsibilities of Site personnel;
- b. staff training protocols as required per condition 48.1 of this Approval;
- c. Site inspections and record keeping procedures required under this Approval;
- d. emergency response procedures as per the Emergency Response and Contingency Plan required under condition 47.1 of this Approval;
- e. procedures for handling complaints as described in this Approval.
- f. spill prevention control and countermeasure protocols, consisting of plans and procedures for dealing with equipment breakdowns, potential spills, including notification of the District Manager;

Air and Noise

- g. frequency of inspections and scheduled preventative maintenance for the Equipment;
- h. parameters to be monitored and frequency of monitoring of those parameters on equipment in the Odour Control System, and procedures to record the results of the monitoring;
- i. A list of critical spare parts for the Odour Control System and their storage location.
- j. procedures to prevent upset conditions including power failure in the Facility;
- k. procedures to minimize all fugitive dust and odour emissions, as detailed in the Dust and Odour Management Plan;
- 1. procedures to prevent and/or minimize noise emissions;

Waste Receiving and Processing

- m. Organic Feedstock receiving and screening procedures;
- n. Organic Feedstock unloading, handling and storage procedures;
- o. Organic Feedstock processing procedures;

- p. Rejected Waste handling and transfer procedures;
- q. waste sampling and testing procedures;

Industrial Sewage Works

- r. procedures for routine operation of the Works;
- s. inspection programs for the Works and the methods or tests employed to detect when maintenance is necessary;
- t. repair and maintenance programs for the Works, including frequency;
- u. procedures for the inspection and calibration of the monitoring equipment for the Works;
- 14.2 A complete set of the above procedures and programs shall be kept at the Site in a single location, must be accessible to personnel at all times and must be updated, as required.

Section Two: s. (9) EPA APPROVAL - AIR AND NOISE

- 15. General Air and Noise
- 15.1 Except as otherwise provided by this Approval, the Facility shall be designed, developed, built, operated and maintained in accordance with the terms and conditions of this Approval and in accordance with the following Schedules attached hereto:
 - a. Schedule "A" Supporting Documentation
 - b. Schedule "B" Equipment with Specific Operational Limits
 - c. Schedule "C" Test Contaminants
 - d. Schedule "D" Source Testing Procedures
 - e. Schedule "E" Procedure to Calculate and Record the 10-minute Average Concentration of Odour
 - f. Schedule "F" Continuous Monitoring System Requirements
 - g. Schedule "G" Biofilter Monitoring Parameters

<u>16.</u> <u>Limited Operational Flexibility</u>

- 16.1 Pursuant to section 20.6 (1) of the EPA and subject to Conditions 16.2 and 16.3 of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are Modifications to the Facility that:
 - a. are within the scope of the operations of the Facility as described in the Description Section of this Approval;

- b. do not result in an increase of the Facility Production Limit above the level specified in the Description Section of this Approval; and
- c. result in compliance with the performance limits as specified in Condition 18.
- 16.2 Condition 16.1 does not apply to,
 - a. the addition of any new Equipment with Specific Operational Limits or to the Modification of any existing Equipment with Specific Operational Limits at the Facility; and
 - b. Modifications to the Facility that would be subject to the Environmental Assessment Act.
- 16.3 Condition 16.1 of this Approval shall expire ten (10) years from the date of this Approval, unless this Approval is revoked prior to the expiry date. The Company may apply for renewal of Condition 16.1 of this Approval by including an ESDM Report and an Acoustic Assessment Report that describes the Facility as of the date of the renewal application.

17. Requirement to Request an Acceptable Point of Impingement Concentration

- 17.1 Prior to making a Modification to the Facility that satisfies Condition 16.1.a. and 16.1.b., the Company shall prepare a proposed update to the ESDM Report to reflect the proposed Modification.
- 17.2 The Company shall request approval of an Acceptable Point of Impingement Concentration for a Compound of Concern if the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and a proposed update to an ESDM Report indicates that one of the following changes with respect to the concentration of the Compound of Concern may occur:
 - a. The Compound of Concern was not a Compound of Concern in the previous version of the ESDM Report and
 - i. the concentration of the Compound of Concern exceeds the concentration set out for the contaminant in the ACB list; or
 - ii. the Compound of Concern is not identified in the ACB list; or
 - b. The concentration of the Compound of Concern in the updated ESDM Report exceeds the higher of,
 - i. the most recent Acceptable Point of Impingement Concentration, and
 - ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
- 17.3 The request required by Condition 17.2 shall propose a concentration for the Compound of Concern and shall contain an assessment, performed by a Toxicologist, of the likelihood of the proposed concentration causing an adverse effect at Points of Impingement.

- 17.4 If the request required by Condition 17.2 is a result of a proposed Modification described in Condition 17.1, the Company shall submit the request, in writing, to the Director at least 30 days prior to commencing to make the Modification. The Director shall provide written confirmation of receipt of this request to the Company.
- 17.5 If a request is required to be made under Condition 17.2 in respect of a proposed Modification described in Condition 17.1, the Company shall not make the Modification mentioned in Condition 17.1 unless the request is approved in writing by the Director.
- 17.6 If the Director notifies the Company in writing that the Director does not approve the request, the Company shall,
 - a. revise and resubmit the request; or
 - b. notify the Director that it will not be making the Modification.
- 17.7 The re-submission mentioned in Condition 17.6 shall be deemed a new submission under Condition 17.2.
- 17.8 If the Director approves the request, the Company shall update the ESDM Report to reflect the Modification.
- 17.9 This Condition does not apply if Condition 16.1 has expired.
- <u>18.</u> Performance Limits
- 18.1 Subject to Condition 18.2, the Company shall not discharge or cause or permit the discharge of a Compound of Concern into the air if,
 - a. the Compound of Concern is identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the Benchmark 1 concentration; or
 - b. the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the higher of,
 - i. if an Acceptable Point of Impingement Concentration exists, the most recent Acceptable Point of Impingement Concentration, and
 - ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
- 18.2 Condition 18.1 does not apply if the benchmark set out in the ACB list has a 10-minute averaging period and no ambient monitor indicates an exceedance at a Point of Impingement where human activities regularly occur at a time when those activities regularly occur.

- 18.3 The Company shall, at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.
- 18.4 The Company shall, at all times, ensure that the vibration emissions from the Facility comply with the limits set out in Ministry Publication NPC-207.
- 18.5 The Company shall operate any Equipment with Specific Operational Limits approved by this Approval in accordance with the Original ESDM Report and Conditions in this Approval.

<u>19.</u> <u>Monitoring</u>

- 19.1 The Company shall monitor:
 - a. the physical parameters of the Biofilter as outlined in Schedule G; and
 - b. the physical parameters of the ColdOxTM and DEOTM as specified in the manufacturer manual or as deemed necessary in accordance with site operational conditions.
- 19.2 The Company shall provide quarterly reports to the District Manager on the first of March, June, September and December of each year on the results of the monitoring required in Condition 19.1.
- 19.3 If, at any time, the results of the monitoring required in Condition 19.1 have suggested abnormal operations of the Facility's processes or in the even of continual receipt of Substantiated Complaints, the Company shall, at the direction of the District Manager, monitor the concentrations of ammonia, hydrogen sulphide, total mercaptans and total amines in the Targeted Sources, using portable monitors and calorimetric tubes.
- <u>20.</u> <u>Source Testing</u>
- 20.1 The Company shall perform annual Source Testing in accordance with the procedure outlined in Schedule D to determine the rates of emissions of the Test Contaminants from the Targeted Sources. The first Source Testing program shall be conducted within one (1) year of the date of this Approval.
- <u>21.</u> <u>Odour Control</u>
- 21.1 With the exception of sealed waste that may be stored outdoors in accordance with this Approval, the Company shall ensure that all unloading and pre-processing of the Organic Feedstock is undertaken entirely within the confines of the Reception Hall Building;
- 21.2 The Company shall ensure that at all times, the air from the Reception Hall Building and Digestate Management Building is exhausted through the fully functional Odour Control System;
- 21.3 The Company shall install and maintain a continuous negative air pressure control and monitoring system in accordance with the Dust and Odour Management Plan.

- 21.4 The Company shall ensure the negative air pressure control and monitoring system is able to continuously monitor and record the negative air pressure atmosphere within the Reception Hall and Digestate Management Buildings at all times in accordance with the Dust and Odour Management Plan.
- 21.5 The Company shall ensure that the exterior loading bay doors into Bay 1, Bay 2 and Bay 3 of the Reception Hall Building are kept closed at all times except to permit the entry or exit of Organic Feedstock transportation vehicles or receiving of Organic Feedstock in totes or similar containers.
- 21.6 The Company shall implement the Contingency Plans detailed in the Dust and Odour Management Plan as they pertain to the action(s) the Company shall take should a Loss of Negative Pressure occur.
- 21.7 The Company shall record and keep a log of each instance of a Loss of Negative Pressure, including date, time, building, duration of pressure loss, reason for pressure loss and the reactive measure taken, if any, and make these records available to the Ministry upon request.
- 21.8 In the event that adequate negative air pressure cannot be maintained in the Reception Hall Building, the Company shall notify the District Manager and immediately cease accepting additional Organic Feedstock.
- 22. Enclosed Flares
- 22.1 The Company shall operate enclosed flare F-1 in such a manner that:
 - a. The temperature in the combustion chamber, is maintained at a minimum of 850 degrees Celsius at all times, when enclosed flare F-1 is in operation; and
 - b. The residence time of the combustion gases in the combustion chamber of enclosed flare F-1 shall not be less than 0.5 seconds at a temperature of 850 degrees Celsius.
- 22.2 The Company shall operate enclosed flare F-2 in such a manner that:
 - a. The temperature in the combustion chamber, is maintained at a minimum of 871 degrees Celsius at all times, when enclosed flare F-2 is in operation; and
 - b. The residence time of the combustion gases in the combustion chamber of enclosed flare F-2 shall not be less than 0.75 seconds at a temperature of 871 degrees Celsius.
- 22.3 The Company shall operate enclosed flare F-3 in such a manner that:
 - a. The temperature in the combustion chamber, is maintained at a minimum of 871 degrees Celsius at all times, when enclosed flare F-3 is in operation; and
 - b. The residence time of the combustion gases in the combustion chamber of enclosed flare F-3 shall not be less than 0.75 seconds at a temperature of 871 degrees Celsius.

23. Continuous Temperature Monitoring

- 23.1 The Company shall continuously monitor the temperature in the combustion chambers of the enclosed flare F-1, enclosed flare F-2 and enclosed flare F-3. The temperature monitor and recorder shall comply with the requirements outlined in Schedule F.
- 24. Documentation Requirements
- 24.1 The Company shall maintain an up-to-date Log.
- 24.2 No later than March 31 in each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
- 24.3 The Company shall make the Emission Summary Table (see section 27 of O. Reg. 419/05) and Acoustic Assessment Summary Table available for examination by any person, without charge, by posting it on the Internet or by making it available during regular business hours at the Facility.
- 24.4 The Company shall, within three (3) months after the expiry of Condition 16.1 of this Approval, update the ESDM Report and the Acoustic Assessment Report such that the information in the reports is accurate as of the date that Condition 16.1 of this Approval expired.
- 24.5 Conditions 24.1 and 24.2 do not apply if Condition 16.1 has expired.
- 25. Written Summary Form
- 25.1 Subject to Condition 25.2, the Company shall prepare, and make available to the Ministry upon request, no later than June 30 of each year, a Written Summary Form signed by the Highest Ranking Person.
- 25.2 Condition 25.1 does not apply if:
 - a. Condition 16.1 has expired; and
 - b. the Written Summary Form has been completed for the year in which Condition 16.1 expired.
- 26. Operation and Maintenance Air and Noise
- 26.1 The Company shall immediately implement the Dust and Odour Management Plan to prevent or mitigate odour and dust emissions from the operation of the Facility. The Dust and Odour Management Plan shall be updated as necessary or at the direction of the District Manager.
- 26.2 The Company shall monitor the performance of the activated carbon in the activated carbon

filters of the Odour Control System to ensure that the activated carbon in the activated carbon filters of the Odour Control System is replaced before it is Exhausted.

- 26.3 The Company shall maintain, in the Facility, an inventory of critical spare parts for the Odour Control System that can be installed in the event of failure. A list of critical spare parts shall be documented in the operating procedures.
- 26.4 The Company shall ensure that all Processes with Significant Environmental Aspects are operated and maintained in accordance with this Approval, the operating procedures and maintenance programs.

27. Record Keeping Requirements - Air and Noise

- 27.1 Any information requested by any employee in or agent of the Ministry concerning the Facility and its operation under this Approval, including, but not limited to, any records required to be kept by this Approval, shall be provided to the employee in or agent of the Ministry, upon request , in a timely manner.
- 27.2 Unless otherwise specified in this Approval, the Company shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this Approval, including,
 - a. a copy of the Original ESDM Report and each updated version;
 - b. a copy of each version of the Acoustic Assessment Report;
 - c. supporting information used in the emission rate calculations performed in the ESDM Reports and Acoustic Assessment Reports;
 - d. the records in the Log;
 - e. copies of the quarterly reports prepared under Condition 19 of this Approval;
 - f. all records of instances of a Loss of Negative Pressure prepared under Condition 21.6;
 - g. copies of each Written Summary Form prepared under Condition 25.1 of this Approval;
 - h. all records produced by Source Testing;
 - i. all records produced by the continuous monitoring system;
 - j. a copy of the Dust and Odour Management Plan;
 - k. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects; and
 - 1. all records related to environmental complaints made by the public as required by Condition 10 of this Approval.

28. <u>Revocation of Previous Approvals</u>

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

Section Three: PART V EPA APPROVAL - WASTE

29. Service Area

29.1 The service area of the Facility is limited to waste generated in Canada and the United States.

<u>31.</u> Hours of Operation

30.1 The Site is approved to operate and receive Organic Feedstock twenty-four hours a day, three hundred and sixty-five (365) days per year.

31. Signs

- 31.1 The Company shall ensure that a sign is posted at the entrance to the Site. The sign shall be visible from the main road leading to the Site. The following information shall be included on the sign:
 - a. name of the Company;
 - b. this Approval number;
 - c. hours during which the Site is open for receipt of waste;
 - d. Organic Feedstock types that are approved to be accepted at the Site;
 - e. Company's telephone number (a hotline) to which complaints may be directed;
 - f. Company's twenty-four hour emergency telephone number (if different from above);
 - g. a warning against unauthorized access;
 - h. a warning against dumping at the Site.
- 32. Site Security
- 32.1 All handling of the Organic Feedstock at the Site shall at all times be undertaken or supervised by Trained Personnel.
- 32.2 The Company shall ensure that access to the Site is regulated and that all entrances are secured by lockable gates to restrict access only to authorized personnel when the Site is not open.
- 32.3 The Company shall ensure the Site is operated in a safe and secure manner, and that all Organic Feedstock is properly handled, packaged or contained and stored so as not to pose any threat to the general public and the Site personnel.
- 33. Approved Feedstock Types
- 33.1 The operation of this Site is limited to the receipt and processing of the following types of waste:
 - a. Category A Organic Feedstock comprised of lipids and proteins that have an acidic pH and a complex molecular structure;

- b. Category B Organic Feedstock comprised of heterogeneous organic feedstocks that typically have an acidic pH and a simple molecular structure;
- c. Category C Organic Feedstock comprised of organic feedstocks that typically have a neutral to slightly alkaline pH, to provide buffering capacity in the digesters;
- d. Agricultural wastes, including but not limited to the following:
 - i. feathers and feather meal;
 - ii. corn gluten;
 - iii. blood and blood meal; and
 - iv. materials typically utilized as animal feed; and
- e. Mineral ingredients for Fertilizer enhancement.
- 33.2 The Company shall not accept at the Site any waste that is classified as hazardous waste in accordance with Reg. 347, any waste that is classified as the SRM, or any biosolids from the municipal wastewater treatment plants.
- 34. Organic Feedstock Receiving Rates and Storage
- 34.1 The total annual amount of Organic Feedstock approved to be accepted at the Site shall not exceed 225,000 tonnes per year.
- 34.2 The total daily amount of Organic Feedstock approved to be accepted at the Site shall not exceed 617 tonnes per day, averaged annually.
- 34.3 With the exception of Organic Feedstock that requires de-packaging, solid Organic Feedstock accepted at the Site shall be temporarily stored in three (3) in-ground Reception Pits located within the confines of the Reception Hall Building prior to being processed and transferred to the appropriate reception tank.
- 34.4 Organic Feedstock approved to be stored at the Site is subject to the following limitations:
 - a. No more than 398 cubic metres of Organic Feedstock shall be stored in the Reception Tank #1 at the Site at any one time.
 - b. No more than 104 cubic metres of Organic Feedstock shall be stored in the Reception Tank #2 at the Site at any one time.
 - c. No more than 1,674 cubic metres of Organic Feedstock shall be stored in the Reception Tank #3 at the Site at any one time.
 - d. No more than 1,761 cubic metres of Organic Feedstock shall be stored in the Reception

Tank #4 at the Site at any one time.

- e. The Reception Tanks #1, #2, #3 and #4 shall be located within the outdoor tank farm shown in the supporting documentation listed in the attached Schedule"A".
- f. No more than 1,107 cubic metres of Organic Feedstock being processed shall be contained within the thermal acidification reactor tank, identified as T.A.R. Tank.
- g. No more than 1,762 cubic metres of Organic Feedstock being processed shall be contained within the thermal acidification reactor tank, identified as T.A.R. Tank #2.
- h. No more than 6,065 cubic metres of Organic Feedstock being processed shall be contained within the primary digester #1, identified as Anamix Tank #1.
- i. No more than 6,065 cubic metres of Organic Feedstock being processed shall be contained within the primary digester #2, identified as Anamix Tank #2;
- j. No more than 5,097 cubic metres of Organic Feedstock being processed shall be contained within the primary digester #3, identified as Anamix Tank #3; and
- k. No more than 6,364 cubic metres of Organic Feedstock being processed shall be contained within the primary digester #4, identified as Anamix Tank #4; and
- j. No more than 2,395 cubic metres of Organic Feedstock being processed shall be contained within the Digestate Holding Tank.
- 34.5 With the exception of any Organic Feedstock requiring de-packaging, the Company shall ensure that all outdoor storage of the Organic Feedstock is undertaken in storage tanks exhausting at all times into the Odour Control System approved in this Approval and located within the spill containment area designed in accordance with the supporting documentation listed in the attached Schedule "A".
- 34.6 Outdoor storage of Organic Feedstock requiring de-packaging is limited to the area designated for outdoor storage in the most recently approved Design and Operations Report and for a duration no longer than forty-eight hours.
- 34.7 If at any time, the Organic Feedstock requiring de-packaging becomes odorous, it shall be moved indoors immediately for processing.
- 34.8 Wastewater storage at the Site is subject to the following limitations:
 - a. No more than 22.7 cubic metres of the condensate, cooling water and other recyclable water from the Facility shall be temporarily stored in the Non-Potable Water Sump located within the confines of the Digestate Management Building, prior to its transfer back to the Facility for re-use in the process or discharged.

- 34.9 Solid Residual Waste storage at the Site is subject to the following limitations:
 - a. No more than 100 tonnes of solid Residual Waste, limited to Residual Waste resulting from Organic Feedstock 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 Feedstock processing at the Site within the confines of the Reception Hall Building and the Digestate Management Building;
 - c packaging material and other recyclable waste may be stored outdoors in roll-off bins.
- 34.10 No outside waste storage other than that described above is approved under this Approval.
- 34.11 The Company shall ensure that all waste storage and handling areas exhaust at all times into the Odour Control System listed in this Approval and is undertaken in a manner that does not cause an adverse effect or a hazard to the environment or any person unless otherwise stated above.
- 34.12 In the event that Organic Feedstock cannot be processed at the Site and the Site is at its approved waste storage capacity, the Company shall cease accepting additional waste. Receipt of additional Organic Feedstock may be resumed once such receipt complies with the waste storage limits approved in this Approval.
- 35. Incoming Feedstock Receipt and Handling
- 35.1 All loads of incoming Organic Feedstock shall be accompanied by documentation containing the results of the required characterization or the identification of a pre-approved generator of Organic Feedstock.
- 35.2 Trained Personnel shall inspect the required documentation prior to acceptance of the incoming Organic Feedstock at the Site.
- 35.3 Organic Feedstock 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 from the Site.
- 35.4 The Company shall only accept the incoming Organic Feedstock that is delivered in vehicles that have been approved as required by the Ministry.
- 35.5 The Company shall ensure that all incoming Organic Feedstock is received within the confines of the Reception Hall Building as shown and described in the supporting documentation listed in the attached Schedule "A". Containers may enter through the unloading ramp on the side of the Reception Hall Building if properly sealed.
- 35.6 The Company shall ensure that the solid Organic Feedstock reception pits, as proposed in the

supporting documentation listed in the attached Schedule "A", are equipped with lids and that the lids are closed at all times except when the solid Organic Feedstock is being unloaded from the vehicles or during maintenance.

- 35.7 The Company shall ensure that sufficient storage capacity is available in the storage tanks prior to transfer of the Organic Feedstock from the Receiving Hall Building.
- 35.8 The Company shall ensure that the Organic Feedstock levels in the storage tanks are monitored and controlled on a continuous basis and that the high level alarms are operational at all times.
- <u>36.</u> <u>Rejected Waste Handling</u>
- 36.1 In the event that waste that is not approved under this Approval is inadvertently accepted at the Site, the Company shall ensure that all Rejected Waste:
 - a. is stored in a way that ensures that no adverse effects result from such storage;
 - b. is segregated from all other waste;
 - c. is handled and removed from the Site in accordance with Reg. 347 and the EPA;
 - d. is removed from the Site within (4) business days of its receipt or as acceptable to the District Manager.
- 36.2 In the event that Rejected 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 rejected and of the origin of the waste, if known.
- 36.3 The District Manager shall be notified in writing of the receipt of unacceptable waste within four (4) business days of its receipt. The following information shall be included in the notification to the District Manager:
 - a. quantity and type of the Rejected Waste;
 - b. source of the Rejected Waste, if known;
 - c. reason for the rejection;
 - d. final destination of the Rejected Waste; and
 - e. date of receipt and time and date of removal from the Site.
- 37. Residual Waste and Liquid Fertilizer Handling
- 37.1 The Company shall ensure that loading of any solid Residual Waste into vehicles for

transportation off the Site is undertaken in a closed building or within a sealed container, as described the supporting documentation listed in the attached Schedule "A".

- 37.2 The Company shall ensure that all vehicles removing solid Residual Waste from the Site are contained and washed, if necessary, prior to their departure from the Site.
- 37.3 Liquid fertilizer is approved for loading out in the Reception Hall Building and also at the load out stations indicated on the drawings listed in the attached Schedule "A".
- <u>38.</u> Processing Limitations
- 38.1 The Company shall ensure that no more than 1,107 cubic metres of Organic Feedstock is being processed in the T.A.R. Tank #1.
- 38.2 The Company shall ensure that no more than 1,674 cubic metres of Organic Feedstock is being processed in the T.A.R. Tank #2.
- 38.3 The Company shall ensure that no more than 6,065 cubic metres of Organic Feedstock is being anaerobically digested in the Anaerobic Digester #1, identified as Anamix Tank #1.
- 38.4 The Company shall ensure that no more than 6,065 cubic metres of Organic Feedstock is being anaerobically digested in the Anaerobic Digester #2, identified as Anamix Tank #2.
- 38.5 The Company shall ensure that no more than 5,097 cubic metres of Organic Feedstock is being anaerobically digested in the Anaerobic Digester #3, identified as the Anamix Tank #3.
- 38.6 The Company shall ensure that no more than 6,065 cubic metres of Organic Feedstock is being anaerobically digested in the Anaerobic Digester #4, identified as Anamix Tank #4.
- 38.7 The Company shall ensure that no more than 2,395 cubic metres of Organic Feedstock is being anaerobically digested in the Digestate Holding Tank.
- <u>39.</u> <u>Collection and Analysis of Samples</u>
- 39.1 The collection and analysis of samples of the Organic Feedstock and Digestate shall be performed in accordance with the Sampling and Analysis Protocol and analyzed by:
 - a. a laboratory that is accredited by the Ministry of Agriculture, Food and Rural Affairs for that purpose; or
 - 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.
 - (Note: "Sampling and Analysis Protocol" means the document of that name prepared by the

Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment, Conservation and Parks for the purposes of O. Reg. 267/03 and dated July 1, 2021, as amended.)

- 39.2 For the purpose of demonstrating compliance with the quality criteria set out in this condition, the Company shall use the most recent results of the required analysis.
- 40. Waste Feedstock Sampling, Analyses, Quality Control and Trace Element Supplementation

Incoming Organic Feedstock Quality Criteria and Testing

- 40.1 The Company shall ensure that the incoming *Organic Feedstock* from each source, prior to pre-processing or after pre-processing if contamination needs to be removed, complies with:
 - a. the maximum metal concentrations set out in column 2 or 3, as applicable, of Table 2 of Schedule 5 of O. Reg. 267/03 which is referenced as Table One below; and
 - b. non-hazardous waste criteria and parameters listed in *Reg. 347*.

Column 1	Column 2	Column 3
Regulated Metal	Maximum Concentrations in Materials that contain total solids dry weight of 10,000 milligrams or more per litre(mg/kg of total solids dry weight)	Maximum Concentrations in Materials that contain total liquid weight of 10,000 milligrams or less per litre(mg/L)
Arsenic	170	1.7
Cadmium	34	0.34
Chromium	2,800	28
Cobalt	340	0.34
Copper	1,700	17
Lead	1,100	11
Mercury	11	0.11
Molybdenum	94	0.94
Nickel	420	4.2
Selenium	34	0.34
Zinc	4,200	42

Table One

Organic Feedstock Quality Control

40.2 For Metals:

- a. The Company shall ensure that prior to its first acceptance of a given new incoming Organic Feedstock, the incoming Organic Feedstock is characterized for metals during the 14-day period preceding its first-time receipt at the Facility.
- b. If the Company relies on published data for the well-studied/characterized incoming Organic Feedstock, the latest published information shall be used to confirm that the characteristics of the proposed incoming Organic Feedstock to be received at the Facility are in compliance with the incoming Organic Feedstock metal quality criteria required under this Approval.
- c. If the published data is not available or used to confirm compliance of the incoming Organic Feedstock with the metal quality criteria from this Approval, the Company shall ensure samples are collected as follows to confirm that the characteristics of the incoming Organic Feedstock to be received at the Facility are in compliance with the incoming Organic Feedstock metal quality criteria required under this Approval:
 - i. for the initial characterization, a minimum of one (1) composite sample from the proposed incoming Organic Feedstock stream, composed of no less than five (5) sub-samples for liquids and no less than ten (10) sub-samples for solids; and
 - ii. following the initial characterization of the incoming Organic Waste, one (1) composite sample every $1,000 \text{ m}^3$ of the given Organic Waste or once a year, whichever comes first, provided the said Organic Waste is of the same type and is from the same source. If, after the first twelve (12) months of sampling and analysis, the results are consistent and continuously below the prescribed limits, one (1) composite sample shall be conducted for the given Organic Waste once a year or following any process changes, operational issues or other factors that may affect the quality of the said Organic Waste. Each composite sample shall be composed of no less than five (5) sub-samples for liquids and no less than ten (10) sub-samples for solids.
- d. The Company shall ensure that each sample of the incoming Organic Feedstock has been analysed for metals listed in column 1 of Table 2 of Schedule 5 of O. Reg. 267/03, in accordance with the methods and frequencies specified in this Approval.
- e. In order to resume accepting a given Organic Feedstock following previous rejection, the Company shall ensure that the analytical requirements listed in this Approval have been fulfilled and that two (2) independent composite samples of the said Organic Feedstock generate analytical results which, separately and consecutively, do not exceed the metal content criteria set out in this Approval.
- f. Should results of testing of the incoming Organic Feedstock for metals fail to meet the quality criteria specified in this Approval, the said Organic Feedstock shall be handled in accordance with the Contingency and Emergency Response Plan.

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

Processed Organic Feedstock Quality Control and Testing

- 40.4 Quality Control Monitoring of the Processed Organic Feedstock:
 - a. Processed Material that is not offered for sale or is sold as Fertilizer in accordance with the Fertilizers Act or is not to be land-applied as non-agricultural source material in accordance with the requirements under the NMA, shall be managed as a processed organic waste in accordance with Part V of the EPA and Reg. 347.
 - b. If the Processed Material is managed as a processed organic waste destined for land application on non-agricultural land, then the Company shall undertake Processed Material sampling and testing required by the conditions of the approval for the site where the Processed Material is to be land-applied.
 - c. If the liquid effluent component of the Processed Material is destined for land application under a Soil Conditioning Site Approval, then the Company shall test for E-Coli, once per week, or as acceptable to the District Manager. The Company shall collect and analyse a composite sample, consisting of a minimum of ten (10) grab samples, and not exceed the geometric mean concentration of E-Coli of 2×10^6 colony forming units per gram of dry matter.
 - d. The Company shall ensure that representative samples are collected and that the samples are properly preserved and tested so that reliable data is collected.
 - e. The Company shall ensure that the sampling and the testing procedures comply with the Ministry's regulatory requirements for sampling and testing of waste.
 - f. The sampling and testing procedures and the required justification for the proposed methods shall be documented in writing, kept at the Site at all times and be made

available for inspection by the Ministry staff upon request.

g. If the Processed Material is managed as a non-agricultural source material destined for agricultural land, then the Company shall undertake Processed Material sampling and testing required by the regulations, policies and guidelines under the NMA.

Digestate Quality Criteria and Testing

- 40.5 If the Digestate is managed as a material destined for land application on agricultural land or managed as a Fertilizer, the Digestate shall comply with the following requirements unless O. Reg. 267/03 requires otherwise for a NASM:
 - a. regulated metal shall not exceed the maximum concentrations set out in Table 2 of Schedule 5 of O. Reg. 267/03, further subject to any other applicable regulatory requirements;
 - b. pathogens shall not exceed the maximum pathogen levels set out in Table 2 of Schedule 6 of O. Reg. 267/03 for CP1 NASM, Table 3 of Schedule 6 of O. Reg. 267/03 for CP2 NASM or Table 5 of "Trade Memorandum T-4-93 Safety standards for fertilizers and supplements" for Fertilizer, as applicable;
 - c. Foreign Matter shall not exceed 2% calculated on a dry weight basis;
 - d. plastics shall not exceed 0.5% calculated on a dry weight basis; and
 - e. there shall not be any particles of any material that will not pass through a screen whose largest opening has an area of 2.5 square centimetres.
- 40.6 If the Digestate is managed as a waste destined for land application on non-agricultural land;
 - a. the Digestate shall meet the quality criteria required by the conditions of the Environmental Compliance Approval for the site where it is to be land-applied; or
 - b. in the absence of specific quality criteria requirements in the Environmental Compliance Approval for the site where the Digestate is to be land-applied, it shall meet the requirements set out in Condition 40.5 of this Approval.
- 40.7 If the Digestate is managed as a NASM destined for land application on agricultural land or managed as a Fertilizer, the Company shall:
 - a. collect one (1) sample per month from the Digestate Holding Tank and analyse the samples for Foreign Matter, Plastics, and metals listed in Table 2 of Schedule 5 of O. Reg. 267/03; and
 - b. collect one (1) sample every two weeks from the Digestate Holding Tank, and analyse

each of the samples for:

- i. Faecal coliforms;
- ii. Salmonella; and
- iii. if the Digestate is managed as a NASM, the pathogens listed in Tables 1, 2 or 3 of Schedule 6 of O. Reg. 267/03, as applicable.

41. Process Monitoring

- 41.1 The Company shall monitor the temperature in T.A.R. Tanks #1 and #2 in accordance with the supporting documentation listed in the attached Schedule "A".
- 42. End Use of Processed Material
- 42.1 The Company shall provide to the Director and to the District Manager a notification from the Canadian Food and Inspection Agency that the Processed Material has been assessed and registered for use as a Fertilizer under the Fertilizers Act.
- 42.2 If the Processed Material is not offered for sale or is sold as a Fertilizer in accordance with the Fertilizers Act but is intended for agricultural land application as a non-agricultural source material, prior to the initial shipping of the Processed Material to the receiving agricultural site, the Company shall ensure that the Processed Material is shipped to the receiving agricultural sites that have complied with all necessary regulatory requirements under the NMA relating to the land application.
- 42.3 If the Processed Material is not offered for sale or is sold as a Fertilizer in accordance with the Fertilizers Act or is not to be land-applied as non-agricultural source material in accordance with the requirements under the NMA, it shall be managed as a processed organic waste in accordance with the requirements of the EPA.
- 42.4 Any Processed Material managed as a processed organic waste shall only be removed from the Site by a hauler approved by the Ministry to transport the said processed organic waste.
- 42.5 Any Processed Material managed as a processed organic waste shall be disposed of at a Ministry approved site or a site approved to accept such waste by an equivalent jurisdiction.
- 43. Wastewater Management
- 43.1 The Company shall ensure that all wastewater generated from the trailer wash down activities and the housekeeping activities within the confines of the Reception Hall Building is contained within the Building and not released to the environment.
- 43.2 The Company shall ensure that all wastewater generated from the trailer wash down activities

and the housekeeping activities within the confines of the Digestate Management Building is contained within the Building and collected in three (3) grit sumps, with one sump located in the fertilizer load out area and the second one located in the Digestate Management Building processing area.

- 43.3 The maximum holding capacity of each grit sump in the Digestate Management Building shall not exceed 10 cubic metres.
- 43.4 The wastewater collected in the grit sumps in the Digestate Management Building shall be pumped to the Centrate Sump, as needed, to ensure that the sumps do not become a source of fugitive odour emissions.
- 43.5 The Company shall regularly clean and disinfect all sumps or wastewater storage/holding areas that are used to contain and collect the wastewater generated within the Reception Hall Building and the Digestate Management Building.
- 43.6 The Company shall ensure that the storage and processing tanks are located within the spill containment area designed in accordance with the supporting documentation listed in the attached Schedule "A".
- 43.7 The Company shall regularly, and in accordance with the supporting documentation listed in the attached Schedule "A", empty out the sump within the spill containment area.

44. <u>Preventative Maintenance Program</u>

- 44.1 The Company shall develop and implement a preventative maintenance program for all on-site equipment associated with the processing and managing of Organic Feedstock and control of odour and dust emissions. The preventative maintenance program shall be maintained up-to-date and shall be available for inspection by a Provincial Officer upon request.
- 45. Nuisance Impact Control & Housekeeping
- 45.1 The Company shall ensure that all vehicles that have delivered Organic Feedstock to the Site are not leaking or dripping Organic Feedstock when leaving the Site.
- 45.2 The Company shall ensure that the exterior of all vehicles delivering the Organic Feedstock to the Site is washed prior to their departure from the Site, as appropriate.
- 45.3 The Company 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.
- 45.4 The Company shall take all practical steps to prevent the escape of litter from the Site;
- 45.5 The Company shall pick up litter around the Site on a regular basis.

- 45.6 The Company shall implement necessary housekeeping procedures to eliminate sources of attraction for vermin and vectors; and
- 45.7 The Company shall if necessary, hire a qualified, licensed pest control professional to design and implement a pest control plan for the Site.
- 45.8 The Company shall ensure that all on-Site roads and operations/yard areas are regularly swept and/or washed to prevent off-Site dust impacts.
- 45.9 The Company shall regularly clean, if necessary, all equipment and storage areas that are used to handle and process the Organic Feedstock at the Site.
- <u>46.</u> Emergency Response and Contingency Plan
- 46.1 The Company shall prepare, retain on-site and update from time-to-time, an Emergency Response and Contingency Plan. The Emergency Response and Contingency Plan shall be prepared in consultation with the District Manager, the local Municipality and the Fire Department and as a minimum it 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. a list of equipment and clean up materials available for dealing with the emergency situations;
 - c. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Site, the Ministry's District Office and Spills Action Centre, the local Fire Department, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response;
 - d. proposed contingency measures, in the case of continued fugitive odour impacts, to alleviate impacts from fugitive odours emitted from the Site, any building, or from the tank farm in general, including the need to excavate and replace impacted tank farm soil;
 - e. proposed contingency measure to alleviate continued impacts from dust originating from the waste management and vehicular activities at the Site;
 - f. trigger mechanism for implementation of the abatement plans required by 46.1(d) and 46.1(e), above;
 - g. procedures and actions to be taken should the incoming Organic Feedstock 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 required by the specified by this Approval;
- i. procedures and actions to be taken should the Processed Material fail to meet the Fertilizer quality criteria specified by the Canadian Food and Inspection Agency;
- j. procedures and actions to be taken should the occurrence of the Substantiated Complaints require the Company to implement additional odour control measures;
- k. procedures and actions to be taken should the occurrence of the Substantiated Complaints require the Company to suspend the processing activities at the Site.
- 46.2 The Emergency Response and Contingency Plan shall be reviewed on an annual basis and updated, if necessary.
- 46.3 An up-to-date version of the Emergency Response and Contingency 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 District Manager, the local Municipality and the Fire Department.
- 46.4 The Company shall immediately take all necessary measures, as outlined in the Emergency Response and Contingency Plan, to handle the emergency situations occurring at the Site.
- 46.5 The Company shall ensure that the equipment and materials outlined in the Emergency Response and Contingency Plan are immediately available at the Site at all times and are in a good state of repair and fully operational.
- 46.6 The Company shall ensure that all Site personnel are fully trained in the use of the equipment and materials outlined in the Emergency Response and Contingency Plan, and in the procedures to be employed in the event of an emergency.

<u>47.</u> <u>Staff Training</u>

- 47.1 All operators of the Site shall be trained with respect to the following as they pertain to their duties:
 - a. terms, conditions and operating requirements of this Approval;
 - b. operation and management of the Site, or area(s) within the Site, as per the specific job requirements of each individual operator, and which may include procedures for receiving, screening and identifying waste, refusal, handling, processing and temporarily storing wastes;
 - c. an outline of the responsibilities of Site personnel including roles and responsibilities during emergency situations;

- d. the Emergency Response and Contingency Plan including exit locations, evacuation routing, and location of relevant equipment available for emergency situations;
- e. environmental, and occupational health and safety concerns pertaining to the wastes to be handled;
- f. relevant waste management legislation and regulations, including the EPA and Reg. 347;
- g. recording procedures as required by this Approval;
- h. equipment and site inspection procedures, as required by this Approval;
- i. nuisance impact control & housekeeping procedures, as required by this Approval, the Dust and Odour Management Plan and the Odour Control Plan; and
- j. procedures for recording and responding to public complaints should that be within their duties.
- 47.2 The Company shall ensure that all personnel are trained in the requirements of this Approval relevant to the employee's position:
 - a. upon commencing employment at the Site in a particular position;
 - b. whenever items listed in condition 47.1 above are changed or updated.
- 47.3 The Company shall maintain an on-Site written or digital record of training as required by this Approval. The record shall include, as a minimum, the following:
 - a. date of training;
 - b. name and signature (or equivalent digital authorization) of person who has been trained; and
 - c. description of the training provided.
- 48. Daily Inspections
- 48.1 The Company shall prepare a comprehensive written inspection program which includes inspections of all aspects of the Site's operations including the following:
 - a. buildings, equipment and indoor storage facilities;
 - b. outdoor storage facility and the containment areas, including the run-off collection sumps;

- c. presence of leaks and drips;
- d. security fencing, gates, barriers and signs; and
- e. off-site impacts such as odour, dust, litter, etc.
- 48.2 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 and that no off-site impacts are occurring. Any deficiencies detected during these regular inspections must be promptly corrected.
- 48.3 The Company shall maintain an on-Site written or digital record of inspections as required by this Approval. The record shall include, as a minimum, the following:
 - a. the name and signature (or equivalent digital authorization) 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.

49. <u>Record Keeping and Retention - Waste</u>

- 49.1 The Company 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 the record;
 - b. quantity and type of the Organic Feedstock received at the Site, including the incoming Organic Feedstock characterization results, if applicable;
 - c. quantity and type of the Organic Feedstock processed at the Site;
 - d. quantity and type of the Organic Feedstock stored at the Site, including the Organic Feedstock levels in the storage and processing tanks;
 - e. quantity and type of the Processed Material, the Rejected Waste and the Residual Waste shipped from the Site for final disposal, including the results of any undertaken characterization;

- f. amount of the Fertilizer shipped from the Site;
- g. amount of the Processed Material (solids and liquid effluent) shipped from the Site and destined for land application on agricultural land and any Processed Material characterization results undertaken in accordance with the requirements under the NMA;
- h. amount of the Processed Material (solids and liquid effluent) shipped from the Site and destined for land application on non-agricultural land and any Processed Material characterization results undertaken in accordance with the approval issued by the Ministry under the EPA for the said land application at the receiving site;
- i. amount of the liquid effluent discharged to the sewer;
- j. receiving site(s) and their Environmental Compliance Approval numbers, accepting the Processed Material, the Rejected Waste and the Residual Waste shipped from the Site;
- k. housekeeping activities, including litter collection, floor washing/cleaning activities, etc.;
- 1. occurrence of an Organic Feedstock processing upset situation requiring an off-Site removal of the Organic Feedstock prior to being considered fully processed as set out in the supporting documentation listed in the attached Schedule "A";
- m. the amount of the Organic Feedstock recirculated from the Digestate Holding Tank into the Anamix Tank #1, Anamix Tank #2, Anamix Tank #3, or Anamix Tank #4 for re-processing.
- 49.2 The Company shall retain all records pertaining to waste characterization required by this Approval for a minimum of three (3) years.
- 49.3 The Company shall maintain an on-Site written or digital record of any 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.
- 49.4 The Company 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. type of 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;
- f. conclusions drawn with respect to the results of the testing.
- 49.5 The Company shall establish and maintain a written or digital record of all monitoring activities at the Site as required by this Approval.
- 49.6 The Company shall establish and maintain a written or digital record of complaints received and the responses made as required by this Approval.
- 49.7 With the exception of waste characterization records, all records detailed in this condition shall be retained for a minimum of two (2) years except as otherwise authorized in writing by the Director.
- 50. Closure Plan
- 50.1 The Company shall submit, for approval by the Director, a written Closure Plan for the Site nine (9) months prior to closure of the Site. This Closure Plan shall 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.
- 50.2 Within ten (10) days after closure of the Site, the Company shall notify the Director, in writing, that the Closure Plan has been implemented and that the Site is closed.

Section Four: APPROVAL FOR THE INDUSTRIAL SEWAGE WORKS

- 51. General Industrial Sewage Works
- 51.1 Except as otherwise provided by these conditions, the Company shall design, build, install, operate and maintain the Works in accordance with the description given below, applicable Items of Schedule "A" and any other supporting documents, plans and specifications that may form part of this Approval.
- 51.2 This Approval approves modifications of existing stormwater management Works and a spill containment facility at the Site to service the expansion of the receiving hall building and associated site modifications at an organic waste to biogas energy facility, for the collection, transmission, treatment and disposal of stormwater runoff from a total site area of approximately

4.3 hectares, to provide Normal Level water quality protection and erosion control, to satisfy Dingman Creek Watershed flood control requirements, and to attenuate post-development peak flows to allowable release rates for all storm events up to and including the 100-year storm event, discharging to an existing municipal storm sewer, consisting of the following Works:

Proposed Works:

- a. Oil and Grit Separator (catchment area 4.3 hectares): one (1) oil and grit separator, Forterra Stormceptor Model EFO6 (or Equivalent Equipment), located east of the existing dry pond between the proposed control building addition and parking lot, having a sediment storage capacity of 3,470 L and an oil storage capacity of 610 litres, an estimated available treatment flow rate of approximately 55 litres per second, receiving runoff from the dry pond described above via on-site private storm sewer system, discharging to the existing municipal sewer along Green Valley Road via existing 150 mm diameter private storm sewer;
- b. one (1) digestate loadout station graded towards the adjacent spill containment area;

Existing Works proposed to be modified:

- c. Storm Sewers (catchment area 4.3 hectares): modifications of the existing on-site private storm sewer system via proposed addition of 150-250 mm diameter storm sewers, complete with associated manholes and catch basins;
- d. Stormwater Management Facility: (catchment area 4.3 hectares): one (1) existing dry pond with one (1) dry sediment forebay at the south-east inlet as well as one (1) 175 cubic metre wet sediment forebay at the south-west inlet, located at the north-west site boundary, receiving inflow via one (1) existing 300 mm diameter inlet pipe from the on-site private storm sewer system as well as via one (1) existing 100 mm diameter forcemain (valve normally closed) from the spill containment facility described below, proposed to be expanded to provide a storage volume of approximately 3,093 cubic meters to contain the 100-year storm event as well as to satisfy Dingman Creek Watershed flood control requirements, complete with 2 metre wide emergency spillway, discharging up to approximately 47 L/s during the 100-year storm event via 150 mm diameter outlet pipe towards the proposed oil and grit separator described below via the existing on-site private storm sewer system;
- e. Spill Containment Facility: (catchment area 0.91 hectares): one existing (1) spill containment facility proposed to be expanded to provide a total storage volume of approximately 8,640 cubic metres at a depth ranging from approximately 1.13 m to 2.25 m, complete with impervious liner as well as one (1) 10.5 metre wide emergency spillway, designed to contain emergency spills from approximately ten (10) process materials and process by-products storage tanks;

Existing Works:

- f. Storm Sewers (catchment area 4.3 hectares): on-site private storm sewer system consisting of various catch basins, manholes and storm sewers ranging from 150 mm to 300 mm in diameter;
- g. one existing (1) 0.7 cubic metre capacity groundwater collection well collecting groundwater from a weeping tile system around each tank foundation within the spill containment area, equipped with one (1) up-to 0.76 Litre per second capacity pump for disposing collected groundwater either to the stormwater management facility described below or a wastewater treatment system located within the spill containment facility;
- h. one existing (1) 7.7 cubic metres capacity concrete sump located at the north side of the spill containment facility, equipped with a 12.5 Litres per second capacity duplex pumping system which is designed to discharge either to a stormwater management facility described below or to a wastewater treatment facility located within the spill containment facility; and

Decommissioning of existing Works:

- i. one (1) precast concrete oil/grit separator (Stormceptor Model STC 300i) designed to handle stormwater run-off from a 4.3-hectare drainage area, operating at a peak treatment design capacity of 60.9 Litres per second, providing a sediment storage capacity of 1,453 Litres and oil storage capacity of 420 Litres having interior diameter of 1.219 meters and height of 1.524 meters, equipped with low flow discharge orifice opening and high flow overflow weir, designed to provide over 70% total net annual TSS removal, discharging through an approximately 55 meters long 150 millimetres diameter storm sewer to an existing 1,650 millimetres diameter municipal storm sewer;
- j. including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Works;
- k. all in accordance with the submitted application and supporting documents listed in Schedule "A" forming part of this Approval.

<u>52.</u> Expiry

- 52.1 The approval of the Works in the Industrial Sewage Works Section of this Approval will cease to apply to those parts of the Works which have not been constructed within five (5) years of the date of this Approval.
- 53. Monitoring and Recording Industrial Sewage
- 53.1 The Company shall, upon commencement of operation of the sewage works, carry out the following monitoring program:

- a. All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- b. Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed:

Table 2 - Effluent Monitoring - (MH18)			
Frequency	Monthly		
Sample Type	Grab		
Parameters	Total Phosphorus, Dissolved Organic Carbon, Total Phenols,		
	Total Ammonia Nitrogen, Temperature and pH		

- c. The methods and protocols for sampling, analysis and recording shall confirm, in order of precedence, to the methods and protocols specified in the following:
 - i. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;
 - ii. the publication "Standard Methods for the Examination of Water and Wastewater" (20th edition), as amended from time to time by more recently published editions;
 - iii. for any parameters not mentioned in the documents referenced in (a), (b) and (c), the written approval of the District Manager shall be obtained prior to sampling.
- d. The list of parameters and monitoring frequencies specified by this condition in respect to any parameter are minimum requirements which may, after two (2) years of monitoring in accordance with this condition, be modified by the District Manager in writing from time to time.
- e. The Company shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities in this condition.

54. Effluent Objectives

54.1 The Company shall design and undertake everything practicable to operate the Works the Works with the objective that the concentrations of the materials named below in Table 3 as effluent parameters are not exceeded in the effluent from the stormwater management pond.

Table 3 - Effluent Objectives					
Effluent Parameter	Monthly Concentration Objective				
Total Phosphorus	0.40 mg/L				
Dissolved Organic Carbon	30.0 mg/L				
Total Phenols	0.02 mg/L				
Total Ammonia Nitrogen	1.0 mg/L				
pH of the effluent maintained within the range of 6.0 to 9.5					

- 54.2 The Company shall undertake everything practicable to ensure that the effluent from the stormwater management pond is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters.
- 54.3 In the event of an exceedance of an objective in condition 54.1, the Company shall:
 - a. immediately conduct an inspection to determine the source of the contaminant;
 - b. take remedial action to prevent further exceedances; and
 - c. submit to the District Manager for review, the results of the inspection and the remedial actions taken or planned to be taken, within one (1) week of receipt of the analytical results with the exceedance.
- 54.4 If the District Manager deems the remedial actions taken as per condition 54.3 to be unsuitable, insufficient or ineffective, the District Manager may direct the Company, in writing, pursuant to the remedial order section (s.17) or the preventative measures order section (s.18) of the EPA to take further measures to address the noted exceedance.
- 54.5 The Company shall include in all reports submitted in accordance with Condition 10, a summary of the efforts made and results achieved under this Condition.
- 55. Operation and Maintenance of the Industrial Sewage Works
- 55.1 The Company shall prepare an operations manual for the Works, that includes, but is not necessarily limited to, the following information:
 - a. operating procedures for routine operation of the Works;
 - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for

the Works;

- d. procedures for the inspection and calibration of monitoring equipment;
- e. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the District Manager; and
- f. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
- 55.2 The Company shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Company shall make the manual available to Ministry staff.
- 55.3 The Company shall keep the Spill Containment Facility discharge outlet gate valve to the Stormwater Management Facility (SWM Pond) in closed position during normal operation periods.
- 55.4 Prior to any planned discharge of stormwater from the Spill Containment Facility to the natural environment, the Company shall collect stormwater grab sample from a designated sampling location (Collection Sump) at the Spill Containment Facility and analyse for the parameters listed in Table 4. The Company shall compare monitoring results with the corresponding trigger level of each parameter listed in Table 4 to identify any contamination of stormwater before allowing any discharge of stormwater from the Spill Containment Facility.

Table 4 - Spill Containment Triggers					
Effluent Parameter	Trigger Level				
Total Phosphorus	0.40 mg/L				
Dissolved Organic Carbon	30.0 mg/L				
Total Phenols	0.02 mg/L				
Total Ammonia Nitrogen	1.0 mg/L				
pH of the effluent maintained within the range of 6.0 to 9.5					

- 55.5 In the event of an exceedance of a trigger level for any of the trigger parameters in condition 55.4, the Company shall:
 - a. ensure that the contents of the Spill Containment Facility are disposed of to a municipal sanitary sewer or hauled off-site for disposal at an approved wastewater treatment plant;
 - b. immediately conduct an inspection to determine the source of the contaminant;

- c. take remedial action to prevent further exceedances; and
- d. submit to the District Manager for review, the results of the inspection and the remedial actions taken or planned to be taken, within one (1) week of receipt of the analytical results with the exceedance.
- 55.6 The Company shall maintain a record of the date and volume of contaminated stormwater and spills for each event when contaminated stormwater and spills from the Spill Containment Facility are discharged to a municipal sanitary sewer.
- 55.7 Discharge of contaminated stormwater and spills from the Works to the receiving surface water is prohibited, except where it is necessary to avoid loss of life, personal injury, danger to public health or severe property damage;
- 55.8 The Company shall undertake an inspection of the condition of the Works, at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the Works to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the Works, as applicable. The Company shall also regularly inspect and clean out the inlet to and outlet from the Works to ensure that these are not obstructed.
- 55.9 The Company shall maintain a record of the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the record at the site and/or Company's operational headquarter for inspection by the Ministry. The record shall include the following:
 - a. the name of the Works;
 - b. the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and
 - c. the volume of contaminated stormwater disposed off-site, the date, and the name of the receiving sewage treatment plant.

Section Five: RESEARCH AND DEVELOPMENT APPROVAL - Genecis VFA Production Demonstration Plant

- 56. Temporary Provision
- 56.1 The Company is approved to conduct the research and development program (the "program") detailed in the application listed as Item 26 of Schedule "A".
- 56.2 Any waste processing or movement which is undertaken as part of the program shall be conducted in a manner which minimizes any potential for spills, incidents or nuisances.
- 56.3 Any liquid waste storage that is undertaken as part of the program, including refrigerated storage of VFA

broth, shall be in accordance with the ministry's publication entitled "Guidelines for environmental protection measures at chemical and waste storage facilities", published August 18, 2017 and updated on July 20, 2021, and shall not exceed 5 cubic metres or 5,000 litres at any one time.

- 56.4 Condition 56.1 above, which approves the program, shall expire one (1) calendar year after the issuance of this Approval. Any extension of the program past one (1) calendar year shall be approved by the Director via application to amend this Approval.
- 56.5 Any waste which is sent off-site as part of the program shall be handled, transported and received in accordance with the EPA and its regulations.
- 56.6 Genecis Bioindustries Inc., on behalf of the Company, shall provide notification to the District Manager of the following:
 - a. the time and date the program will be conducted, at least two (2) days prior to the program being conducted, and
 - b. the completion of the program, within two (2) days of the program being completed.
- 56.7 Within thirty (30) days of the completion of the program, Genecis Bioindustries Inc. shall, on behalf of the Company, provide a report to the Director and the District Manager, detailing the general findings and conclusions of the program and any next steps towards commercialization and/or large scale roll-out.

Part Three: Schedules

1. <u>Schedule "A": Supporting Documentation</u>

- 1. Environmental Compliance Approval Application, dated August 24, 2017, certified by Chris Guillon and submitted by the Company.
- Application for Approval of Industrial Sewage Works submitted by the StormFisher Ltd., dated March 12, 2009 and design specification and drawings prepared by the Walter Fedy Partnership, Engineers and Project Managers, Kitchener, Ontario and Conestoga-Rovers & Associates, Waterloo, Ontario.
- 3. Report dated March 1, 2018, prepared by Walter Fedy Partnership, Engineers and Project Managers, Kitchener, Ontario including all attached information, drawings and appendices.
- 4. Letter dated March 29, 2018, prepared by StormFisher Environmental Ltd., including all attached information and appendices.
- 5. StormFisher Environmental Servicing and Stormwater Management Design Brief, prepared by WalterFedy and dated April 26, 2018
- 6. Additional information provided by Brandon Moffatt, StormFisher Environmental Ltd. in an email dated June 21, 2018.
- Environmental Compliance Approval Application for Industrial Sewage Works (stormwater management) submitted and signed by Brandon Moffat, Vice President -Development and Operations, dated November 5, 2019 and received on November 6, 2019, including all supporting documentation and information.
- 8. A report entitled "Environmental Compliance Approval Application Amendment to Existing ECA No. 1442-7RRKQL" dated November 4, 2019, including calculations and engineering drawings, prepared by RWDI AIR Inc.
- 9. Letter to the attention of Rob Wrigley, Ministry of the Environment, Conservation and Parks, London District Office, from Brandon Moffatt, Stormfisher Environmental Ltd. RE: SSO Contingency.
- 10. Environmental Compliance Approval application for a Waste Disposal Site dated March 27, 2020, prepared by StormFisher Environmental Ltd., including all attached supporting information and appendices.
- 11. E-mail dated July 6, 2020, to Brent Langille, P. Eng., RWDI Consultants, from Nick Zambito, Project Engineer, Ministry of the Environment, Conservation and Parks.

- 12. E-mail dated July 6, 2020, to Pearce Fallis, P. Eng., StormFisher Environmental from David Lee, Senior Waste Review Engineer Coordinator, Ministry of the Environment, Conservation and Parks.
- 13. Memorandum prepared by Daniel Ferguson, P. Eng., WalterFedy, dated July 9, 2020, to Pearce Fallis, P. Eng., Vice President, Operations, StormFisher Environmental which includes all revised drawings.
- 14. Letter dated July 10, 2020, to Mohsen Keyvani, Director, Environmental Approvals Branch, Ministry of the Environment, Conservation and Parks, from Brandon Moffatt, P. Eng., StormFisher Environmental Ltd. re: Response to July 6, 2020, e-mails from David Lee, P. Eng. and Nick Zambito, P. Eng., Ministry of the Environment, Conservation and Parks.
- 15. E-mail dated July 31, 2020, to Pearce Fallis, StormFisher Environmental Ltd. from Nick Zambito, MECP.
- 16. E-mail dated August 17, 2020 to David Lee, MECP from Pearce Faills, StormFisher Environmental Ltd.
- 17. Environmental Compliance Approval Application for Small Research and Development Projects, dated March 28, 2022, signed by Paula Stanley, Director of Regulatory Compliance, Stormfisher Environmental Ltd., including all attached supporting documentation.
- 18. Environmental Compliance Approval Application, dated July 17, 2022, signed by Paula Stanley, Director of Regulatory Compliance, Stormfisher Environmental Ltd., including all attached supporting documentation.
- 19. Environmental Compliance Approval Application for Small Research and Development Projects, dated November 25, 2022, signed by Paula Stanley, Director of Regulatory Compliance, Stormfisher Environmental Ltd., including all attached supporting documentation.
- 20. Environmental Compliance Approval Application, dated September 12, 2022, signed by Paula Stanley, Director of Regulatory Compliance, Stormfisher Environmental Ltd., including all attached supporting documentation.
- 21. Emission Summary and Dispersion Modelling Report, prepared by Andrew Chan, Pinchin Ltd. and dated August 23, 2022;
- 22. Dust and Odour Management Plan, prepared by the Company and dated August 25, 2022;
- 23. Acoustic Assessment Report (AAR) dated August 22, 2022, prepared by Pinchin Ltd.,

and signed by Weidong Li, PhD., P.Eng;

- 24. Additional information provided by Andrew Chan, Pinchin Ltd. in emails dated April 25, 2023 and May 5, 2023.
- 25. Design Brief "Stormfisher London Expansion" dated August 19, 2022 and revised May 2, 2023, including calculations and engineering drawings, prepared by WalterFedy Inc.
- 26. Email dated May 4, 2023, from Paula Stanley, Director of Regulatory Compliance, Stormfisher, re: Stormfisher Expansion ECA Application - Waste Review Technical Comments, including all attachments and appendices.
- 27. Updated Design and Operations Report, Version 4.0, prepared by Stormfisher Environmental including all figures, drawings, tables and appendices.
- 28. Updated Emergency Response and Contingency Plan, Rev [03], dated September 9, 2022, prepared by Stormfisher Environmental including all figures, drawings, tables and appendices.
- 29. Email dated June 1, 2023, from Paula Stanley, Director of Regulatory Compliance, Stormfisher, re: FA Estimate, including all attachments and appendices.
- 2. Schedule "B": Equipment with Specific Operational Limits
 - 1. one (1) enclosed flare system, identified as F-1, for the incineration of up to 1,600 cubic metres per hour of biogas, discharging to the atmosphere through a 2.2 metre diameter enclosure, extending 11.0 metres above grade;
 - 2. one (1) enclosed flare system, identified as F-2, for the incineration of up to 1,200 cubic metres per hour of biogas, discharging to the atmosphere through a 2.1 metre diameter enclosure, extending 15.2 metres above grade;
 - 3. one (1) enclosed flare system, identified as F-3, for the incineration of up to 2,400 cubic metres per hour of biogas, discharging to the atmosphere through a 2.1 metre diameter enclosure, extending 15.2 metres above grade;
- 3. Schedule "C": Test Contaminants
 - 1. Odour
 - 2. Total Reduced Sulphur Compounds
- 4. <u>Schedule "D": Source Testing Procedure</u>

- 1. The Company shall submit, not later than three (3) months prior to the Source Testing, to the Manager a Pre-Test Plan for the Source Testing required under this Approval.
- 2. The Company shall finalize the Pre-Test Plan in consultation with the Manager.
- 3. The Company shall not commence the Source Testing required under this Approval until the Manager has approved the Pre-Test Plan.
- 4. The Company shall complete the first Source Testing within one (1) year of the date of this Approval and the Company shall complete subsequent Source Testing every one (1) calendar year thereafter.
- 5. The Company shall notify the Manager, the District Manager and the Director in writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to the Source Testing.
- 6. The Company shall submit a report (electronic format) on the Source Testing to the Manager, the District Manager and the Director not later than three (3) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
 - a. an executive summary;
 - b. an identification of the applicable North American Industry Classification System code (NAICS) for the Facility;
 - c. records of weather conditions such as ambient temperatures and relative humidity, at the time of the Source Testing;
 - d. records of operating conditions at the time of Source Testing, including but not limited to the following:
 - i. the receipt rates of the Organic Feedstock;
 - ii. the operational conditions of the anaerobic digesters; and
 - iii. the operational parameters of the Odour Control System;
 - e. results of Source Testing, including the emission rates and emission concentration of the Test Contaminants from the Targeted Sources;
 - f. a tabular comparison of calculated emission rates based on Source Testing results for the Test Contaminants to relevant estimates described in the ESDM Report; and

- g. the results of dispersion calculations using the maximum emission rates for odour for the Equipment, indicating the maximum 10-minute average concentration of odour, calculated in accordance with the procedures outlined in Schedule E, at the most impacted Sensitive Receptor and the yearly frequency of exceedance of 1 odour unit at the most impacted Sensitive Receptor.
- 7. The Director may not accept the results of the Source Testing if:
 - a. the Source Testing Code or the requirement of the Manager were not followed;
 - b. the Company did not notify the Manager, the District Manager and Director of the Source Testing; or
 - c. the Company failed to provide a complete report on the Source Testing.
- 8. If the Director does not accept the result of the Source Testing, the Director may require re-testing. If re-testing is required, the Pre-Test Plan strategies need to be revised and submitted to the Manager for approval. The actions taken to minimize the possibility of the Source Testing results not being accepted by the Director must be noted in the revision.
- 9. The Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 and the Procedure Document with the results from the Source Testing if any of the calculated emission rates are higher than the predicted rates in the ESDM report, not later than three (3) months after the submission of the Source Testing report and make these records available for review by staff of the Ministry upon request.
- 10. The District Manager may alter the requirements of subsequent Source Testing if the results of the Source Testing indicate that the environmental impact from the Test Contaminants are insignificant or the emissions from the Targeted Sources have already been sufficiently characterized as determined by the District Manager.
- 5. Schedule "E": Procedure to Calculate and Record the 10-minute Average Concentration of Odour at the Point of Impingement and at the Most Impacted Sensitive Receptor
 - 1. Calculate and record one-hour average concentration of odour at the *Point of Impingement* and at the most impacted *Sensitive Receptor*, employing the AERMOD atmospheric dispersion model or any other model acceptable to the *Director*, that employs at least five (5) years of hourly local meteorological data and that can provide results reported as individual one-hour average odour concentrations;
 - 2. Convert and record each of the one-hour average concentrations predicted over the five (5) years of hourly local meteorological data at the *Point of Impingement* and at the most impacted *Sensitive Receptor* to 10-minute average concentrations using the one-hour average to 10-minute average conversion described below; and

3. Record and present the 10-minute average concentrations predicted to occur over a five (5) year period at the *Point of Impingement* and the most impacted *Sensitive Receptor* in a histogram. The histogram shall identify all predicated 10-minute average odour concentrations occurrences in terms of frequency, identifying the number of occurrences over the entire range of predicated odour concentration in increments of not more than 1/10 of one odour unit. The maximum 10-minute average concentration of odour at the *Sensitive Receptor* will be considered to be the maximum odour concentration at the most impacted *Sensitive Receptor* that occurs and is represented in the histogram, disregarding outlying data points on the histogram as agreed to by the *Director*.

One-hour Average to 10-minute Average Conversion

Use the following formula to convert and record one-hour average concentrations at the *Point of Impingement* and at the most impacted *Sensitive Receptor* to 10-minute average concentrations:

 $X_{10 \text{ min}} = X_{60 \text{ min}} * 1.65$ where:

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

 X_{60min} = one-hour average concentration

6. Schedule "F": Continuous Monitoring System Requirements

PARAMETER: Temperature

LOCATION:

The continuous temperature monitors shall be located at a location where the measurements are representative of the actual operating temperatures.

PERFORMANCE:

The continuous temperature monitor shall meet the following minimum performance specifications for the following parameters:

Parameter	Specification
Туре:	Shielded "k" type thermocouple, or equivalent
Accuracy:	+/- 5 degrees Celsius

DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor without a

significant loss of accuracy and with a time resolution of 1 minute or better.

RELIABILITY:

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.

7. Schedule "G": Biofilter Monitoring Parameters

The *Company* shall monitor and record the operational parameters of the *Biofilter*, either as specified in the manufacturer manual for the *Biofilter*, or as deemed necessary in accordance with site operational conditions, as follows:

- 1. Pressure drop across the *Biofilter* bed (kilopascals), weekly;
- 2. Process air flow through the *Biofilter* (cubic metres per second), daily;
- 3. *Biofilter* bed moisture (percent), weekly;
- 4. *Biofilter* bed temperature (degrees Celsius), daily;
- 5. Inlet air temperature (degrees Celsius), after the pre-humidification chamber, daily;
- 6. Inlet air relative humidity (percent), after the pre-humidification chamber, daily;
- 7. pH of the water run-off from the *Biofilter* bed, monthly; and
- 8. Water flow in the pre-humidification chamber and the media irrigation system, daily.

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

Section One: GENERAL

Conditions 1.1, 1.2, 2.1, 2.2, 3.1 through 3.4, 4.1, and 5.1 through 5.4 are included to clarify the legal rights and responsibilities of the Company.

Condition 6.1 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 6.2 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 7.1 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.

Conditions 8.1 through 8.5 are included to require the Company to provide to the Ministry a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Company in resolving any problems in a timely manner.

Conditions 9.1 and 9.2 are included to require further spill notification to the Ministry, in addition to the requirements already listed in Part X of the EPA.

Conditions 10.1 and 10.2 are included to require the Company to respond to any environmental complaints regarding the operation of the Site, according to a procedure that includes methods for preventing recurrence of similar incidents and a requirement to prepare and retain a written report.

Conditions 11.1, 11.2 and 11.3 are included to ensure that sufficient funds are available to the Ministry to clean up the Site in the event that the Company is unable or unwilling to do so.

Conditions 12.1 and 12.2 are included to require the Company to provide to the Ministry a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Company in resolving any problems in a timely manner.

Conditions 13.1 through 13.6 are included to require the Company to establish a forum for the exchange of information and public dialogue on activities carried out at the Site. Open communication with the public and local authorities is important in helping to maintain high standards for the operation of the Site and protection of the natural environment.

Conditions 14.1 and 14.2 are 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.

Section Two: s. (9) EPA APPROVAL - AIR AND NOISE

Condition No. 15 is included to require the Approval holder to build, operate and maintain the Facility in accordance with the Supporting Documentation in Schedule A considered by the Director in issuing this Approval.

Conditions No. 16, 17 and 18 are included to limit and define the Modifications permitted by this Approval, and to set out the circumstances in which the Company shall request approval of an Acceptable Point of Impingement Concentration prior to making Modifications. The holder of the Approval is approved for operational flexibility for the Facility that is consistent with the description of the operations included with the application up to the Facility Production Limit. In return for the operational flexibility, the Approval places performance based limits that cannot be exceeded under the terms of this Approval. Approval holders will still have to obtain other relevant approvals required to operate the Facility, including requirements under other environmental legislation such as the Environmental Assessment Act.

Conditions 19, 20 and 23 are included to require the Company to gather accurate information so that compliance with the operating requirements of this Approval can be verified.

Condition 21 is included to require the Company to properly operate and maintain the Facility/Equipment to minimize impact to the environment.

Condition No. 22 is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the Regulations and this Approval.

Condition No. 24 is included to require the Company to maintain ongoing documentation that demonstrates compliance with the performance limits as specified in Condition 18 of this Approval and allows the Ministry to monitor on-going compliance with these performance limits. The Company is required to have an up to date ESDM Report and Acoustic Assessment Report that describe the Facility at all times and make the Emission Summary Table and Acoustic Assessment Summary Table from these reports available to the public on an ongoing basis in order to maintain public communication with regard to the emissions from the Facility.

Condition No. 25 is included to require the Company to prepare, and make available to the Ministry upon request, a yearly Written Summary Form, to assist the Ministry with the review of the site's compliance with the EPA, the regulations and this Approval.

Condition No. 26 is included to require the Company to properly operate and maintain the Processes with Significant Environmental Aspects to minimize the impact to the environment from these processes.

Condition No. 27 is included to require the Company to retain all documentation related to this Approval and provide access to employees in or agents of the Ministry, upon request, so that the Ministry can determine if a more detailed review of compliance with the performance limits as specified in Condition 18 of this Approval is necessary.

Condition No. 28 is included to identify that this Approval replaces all Section 9 Certificate(s) of Approval and Part II.1 Approvals in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

Section Three: PART V EPA APPROVAL - WASTE

Conditions 29.1 is included to specify the approved service area of the Site.

Condition 30.1 is included to specify the hours of operation of the Site and to limit the time during which waste can be received at the Site.

Conditions 31.1 and 31.2 are 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.

Conditions 32.1, 32.2 and 32.3 are 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.

Conditions 33.1 and 33.2 are included to specify the type of Organic Feedstock that may be received at the Site.

Conditions 34.1 through 34.12 are included to specify the approved Organic Feedstock receipt rate and waste storage limitations at the Site based on the Company's application and supporting documentation. Condition 34.4 is also included to specify the maximum amount of Organic Feedstock, Processed Material, Residual Waste and Rejected Waste that is approved to be stored at the Site and that is covered by the required Financial Assurance.

Conditions 35.1 through 35.4 are included to ensure that only the approved Organic Feedstock types are accepted and processed at the Site.

Conditions 35.5 and 35.6 are included to ensure that waste is managed in a manner that minimizes potential impacts from fugitive odour emissions.

Conditions 35.7 and 35.8 are included to ensure that waste is stored in the manner detailed in the application for an Environmental Compliance Approval and not in a manner that the Director has not been asked to consider.

Conditions 36.1, 36.2 and 36.3 are included to specify the requirements for handling of the Rejected Waste that was inadvertently received at the Site.

Conditions 37.1, 37.2 are included to ensure that handling and storage of any solid waste is undertaken in a way which does not result in an adverse effect or a hazard to the environment or any person.

Conditions 38.1 through 38.7 are included to ensure that Organic Feedstock, Processed Material, Residual Waste and Rejected Waste handling and storage are undertaken in a way which does not result in an adverse effect or a hazard to the environment or any person.

Conditions 39 and 40 are included to require all Organic Feedstock received at the Site and shipped off the Site to be characterized so that only Organic Feedstock approved by this Approval is handled at the Site and that all waste transferred off Site is handled in accordance with the applicable regulatory requirements. They are also included to ensure any trace element supplementation is carried out in a manner which will not result in a potential for a health and safety hazard to the environment and/or public and not in a manner which the Director has not been asked to consider.

Condition 41.1 is also included to require the Company to undertake temperature monitoring of the Organic Feedstock undergoing processing within the T.A.R.

Conditions 42.1 through 42.5 are included to ensure that unless the Processed Material is managed as a Fertilizer, it is properly managed, processed and disposed of in accordance with the Ministry's regulatory requirements, the requirements under the NMA and in a manner that protects the health and safety of the public and the environment.

Conditions 43.1 through 43.7 are included to ensure that the wastewater generated at the Site is handled in accordance with the Ministry's requirements and in a manner which does not result in a negative impact on the natural environment or any person.

Condition 44.1 is included to ensure that equipment at the Site is maintained to minimize operational disruptions at the Site that may lead to an adverse effect.

Conditions 45.1 through 45.9 are 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.

Conditions 46.1 through 46.6 are ensure that the Company is prepared and properly equipped to take action in the event of an emergency situation.

Conditions 47.1, 47.2 and 47.3 are 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.

Conditions 48.1, 48.2 and 48.3 are included to require the Site to be maintained and inspected 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.

Conditions 49.1 and 49.7 are included to ensure that detailed records of Site activities, inspections, monitoring and upsets are recorded and maintained for inspection and information purposes.

Condition 50.1 and 50.2 are included to ensure that final or temporary closure of the Site is completed in accordance with Ministry's standards.

Section Four: APPROVAL FOR THE INDUSTRIAL SEWAGE WORKS

Conditions 51.1 and 51.2 are imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted.

Condition 52.1 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.

Conditions 53.1 through 53.4 are included to enable the Company to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives specified in the Approval and that the Works do not cause any impairment to the receiving watercourse.

Condition 54.1 is imposed to establish non-enforceable effluent quality objectives which the Company is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.

Condition 55.1 through 55.9 is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Company and made available to the Ministry.

Section Five: TEMPORARY PROVISION FOR RESEARCH AND DEVELOPMENT PROGRAM

The reason for Conditions 56.1 through 56.2 is to approve the research and development program proposed by the Company in accordance with the plans and documentation submitted and not in a manner which the Director has not been asked to consider.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 1442-7RRKQL issued on January 6, 2023.

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

requiring the hearing ("the Notice") shall state:

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

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	and	The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario	and	Part II.1 of the <i>Environmental Protection Act</i> Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor
M5G 1E5 OLT.Registrar@ontario.ca		M7A 2J3		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) 448-2148, or www.olt.gov.on.ca

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

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

DATED AT TORONTO this 18th day of September, 2023

that I

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

The Director appointed for the nurposes of

DL/

c: District Manager, MECP London - District Paula Stanley, StormFisher Environmental Ltd.