

**AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 1442-7RRKQL  
Issue Date: October 21, 2022

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 Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:*

a 4.27-hectare anaerobic digestion facility, to process 195,000 tonnes of *Organic Feedstock* per year to generate a total power of 2,850 kilowatts of electricity, 3,020 kilowatts of thermal power and 1,200 Nm<sup>3</sup>/hour of biogas to renewable natural gas, consisting of the following processes and support units:

1. Receipt, pre-treatment and temporary storage of *Organic Feedstock* ;
2. Anaerobic treatment of the pre-treated and mixed *Organic Feedstock* , including the hydrolysis in the thermal acidification reaction tank and the anaerobic digestion in the three (3) primary anaerobic digesters and in one (1) secondary anaerobic digester;
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* ;
6. Production of activated charcoal using the CHAR technology;

7. Aerobic treatment of the wastewater generated at the *Site* ;

including the *Equipment* , the *Works* , and any other ancillary and support processes and activities, operating at a *Facility Production Limit* of up to 195,000 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**

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

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

3. "*Acoustic Assessment Report* " means the report, prepared in accordance with *Publication NPC-233* and Appendix A of the *Basic Comprehensive User Guide* , by Weidong Li, Pinchin Ltd. and dated December 19,2017 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 26 of this *Approval*;
4. "*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 26 of this *Approval* ;
5. "*Approval* " means this entire Environmental Compliance Approval and any *Schedules* to it;
6. "*Basic Comprehensive User Guide* " means the *Ministry* document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
7. "*Biofilter* " means the biofilter(s) as described in the *ESDM Report* and the *Dust and Odour*

*Management Plan* ;

8. "*BOD5* " means five-day biological oxygen demand measured in an unfiltered wastewater sample and includes carbonaceous and nitrogenous oxygen demand;
9. "*CBOD5* " means five-day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered water sample;
10. "*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* ;
11. "*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;
12. "*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* ;
13. "*Digestate* " means the effluent from the Secondary Digester;
14. "*Director* " means a person appointed for the purpose of section 20.3 of the *EPA* by the *Minister* pursuant to section 5 of the *EPA* ;
15. "*District Manager* " means the *District Manager* of the appropriate local district office of the *Ministry* , where the *Facility* is geographically located;
16. "*Dust and Odour Management Plan* " means the report entitled Dust and Odour Management Plan, dated September 20, 2018 and prepared by the *Company* , as amended;
17. "*Emergency Response and Contingency Plan* " means the report, prepared by the *Company* , and amended to this *Approval* as Item (11) of Schedule "A";
18. "*Emission Summary Table* " means a table described in paragraph 14 of subsection 26 (1) of *O. Reg. 419/05* ;
19. "*Environmental Assessment Act* " means the Environmental Assessment Act, R.S.O. 1990, c.E.18 , as amended;
20. "*EPA* " means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
21. "*Equipment 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* ;

22. "*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;
23. "*ESDM Report* " means the most current Emission Summary and Dispersion Modelling Report that describes the *Facility* . The *ESDM Report* is based on the Original *ESDM Report* and is updated after the issuance of this *Approval* in accordance with section 26 of *O. Reg. 419/05* and the *Procedure Document* ;
24. "*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;
25. "*Facility Production Limit* " means the production limit placed by the *Director* on the main product(s) or raw materials used by the *Facility* ;
26. "*Facility* " means the entire operation located on the property where the *Equipment* is located;
27. "*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* ;
28. "*Fertilizers Act* " means the Fertilizers Act, R.S., 1985, c-F-10, as amended;
29. "*Log* " means a document that contains a record of each change that is required to be made to the *ESDM Report* and *Acoustic Assessment Report* , including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a *Point of Impingement* and all changes to information associated with a *Modification* to the *Facility* that satisfies condition 16;
30. "*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* ;
31. "*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* ;
32. "*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;

33. "*Ministry* " means the ministry of the *Minister* ;
34. "*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* ;
35. "*NMA* " means the Nutrient Management Act, 2002. S.O. 2002. c.4, as amended;
36. "*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;
37. "*O. Reg. 419/05* " means Ontario Regulation 419/05, Air Pollution- Local Air Quality, as amended;
38. "*Odour Control System* " means the *Biofilter* and activated carbon filters, exhausting to a single stack, used to reduce air emissions from the *Equipment* as described in the *ESDM Report* and the *Dust and Odour Management Plan* ;
39. "*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;
40. "*Organic Matter* " means organic matter having carbon content expressed as equivalent methane;
41. "*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 April 6, 2018 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this *Approval* ;
42. "*OWRA* " means the Ontario Water Resources Act. R.S.O. 1990. c. 40, as amended;
43. "*PA* " means the Pesticides Act, R.S.O. 1990, c. P-11, as amended;
44. "*Point of Impingement* " has the same meaning as in section 2 of *O. Reg. 419/05* ;
45. "*Point of Reception* " means Point of Reception as defined by *Publication NPC-300* ;
46. "*Pre-Test Plan* " means a plan for the *Source Testing* including the information required in section 5 of the *Source Testing Code* ;
47. "*Procedure Document* " means *Ministry* guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated February 2017, as amended;

48. "*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* ;
49. "*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* ;
50. "*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* ;
51. "*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;
52. "*Publication NPC-233* " means the *Ministry* Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
53. "*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;
54. "*Reg. 347* " means R.R.O. 1990, Reg. 347: General - Waste Management, made under the *EPA* , as amended;
55. "*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* ;
56. "*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* ;
57. "*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" - *Biofilter* Monitoring Parameters
58. "SDWA " means the Safe Drinking Water Act 2002, S.O. 2002 c. 32, as amended;
59. "*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).
60. "*Site* " means the StormFisher Environmental Ltd. property at 1087 Green Valley Road in the City of London, Ontario on which the *Facility* is located;
61. "*Source Testing Code* " means the Ontario Source Testing Code, dated June 2010, prepared by the *Ministry* , as amended;
62. "*Source Testing* " means sampling and testing to measure emissions resulting from operating the *Odour Control System* stack at a level of maximum production within the approved operating range of the equipment which satisfies paragraph 2 of subsection 11(1) of *O. Reg. 419/05* ;
63. "*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 Health of Animals Regulations C.R.C. c. 296, as amended;
64. "*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* ;
65. "*Test Contaminants* " means those contaminants set out in Schedule "C" of this *Approval* ;
66. "*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;

67. "*Trained Personnel* " means a person 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* .
68. "*Works* " means the sewage works described in the *Company* 's Application for Approval of Industrial Sewage Works, this *Approval* and in the supporting documentation referred to herein, to the extent approved by this *Approval* ;
69. "*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**

##### **1. Compliance**



- 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*.

## 2. In Accordance

- 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 (1) Construction and installation of the aspects of the Site described in Items (16) through (23) of Schedule "A" must be completed within five (5) years of the later of:
- (a) the date this *Approval* is issued; or
  - (b) 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.
- (2) 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(1) above.

## 3. 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. Adverse Effects

- 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.

## 9. Spills

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 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 three (3) calendar days outlining the nature of the Spill, remedial measure taken and the measures taken to prevent future occurrences at the *Site*.

## 10. Complaint Response Procedures

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*. This call centre will be responsible for recording the complaint. The *Company* shall be responsible for notifying the *District Manager* of the complaint. The telephone number of the third party call centre will 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 record each complaint/emission event 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* 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. Except in instances with more than one complainant, 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 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*.
- 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.

## 11. Financial Assurance

- 11.1 The *Company* shall maintain Financial Assurance as defined in Section 131 of the *Act* , in the amount of CAD397,587.00. 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, 2024 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.

## 12. Reporting Requirements

- 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 *Written Summary Form* that shall include the following:
    - i. a declaration of whether the *Facility* was in compliance with section 9 of the *EPA*, *O. Reg. 419/05* and the conditions of this *Approval*; and
    - ii. a summary of each *Modification* that took place in the previous calendar year that resulted in a change in the previously calculated concentration at the *Point of Impingement* for any *Compound of Concern* or resulted in a change in the sound levels reported in the *Acoustic Assessment Summary Table* at any *Point of Reception*;
  - b. a list of all *Compounds of Concern* for which a request for approval of an *Acceptable Point of Impingement Concentration* was submitted to the *Director* pursuant to condition 17.2 of this *Approval*;
  - c. if the *Company* has modified the *Facility* and was not required to submit a request for approval of an *Acceptable Point of Impingement Concentration* with respect to a *Compound of Concern* under condition 17.2, a list and concentration level of all such *Compounds of Concern*;
  - d. a table of the changes in the emission rate of any *Compound of Concern* and the resultant increase or decrease in the concentration at the *Point of Impingement* reported in the *ESDM Report*;
  - e. the *Emission Summary Table* and *Acoustic Assessment Summary Table* for the *Facility* as of December 31 from the previous calendar year;
  - f. a monthly summary of the quality and the quantity of all incoming and outgoing wastes, including analytical data required to characterize the waste;
  - g. material balance for each month documenting the amount of wastes stored at the *Site*;
  - h. a monthly summary of the quality and the quantity of the *Fertilizer* shipped off the *Site*;
  - i. 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;
  - j. any recommendations to minimize environmental impacts from the operation of the *Site* and to improve *Site* operation and monitoring programs in this regard;

- k. a summary of any complaints received and the responses made;
  - l. a summary of any emergency situations that have occurred at the *Site* and how they were handled;
  - m. an update on the amount of financial assurance which has been provided to the *Director*;
  - n. update on activities of the Public Liaison Committee;
  - o. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the *Works*;
  - p. a summary of all effluent monitoring results undertaken in the reporting period;
  - q. a summary of all discharges of contaminated stormwater and spills to the municipal sanitary sewer including date and volume for each event;
  - r. a summary of the calibration and maintenance carried out on all effluent monitoring equipment; and
  - s. any other information the *District Manager* requires from time to time.
- 12.2 Paragraphs (a), (b), (c) and (d) of condition 12.1 above do not apply if condition 16.1 has expired.

### 13. Public Liaison Committee

- 13.1 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 within 1,000 metres of the *Site*.
- 13.2 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.
- 13.3 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*.



- 13.4 The *Company* shall invite representation from the following groups to participate on the PLC:
- a. the City of London;
  - b. home owners within 1,000 metres of the *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.

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 manual of 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* ;
- l. 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 copy of the manual required above shall be kept at the *Site*, 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 Procedure*
- e. 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*
- f. Schedule "F" - Continuous Monitoring System Requirements
- g. Schedule "G" - *Biofilter* Monitoring Parameters

16. Limited Operational Flexibility

16.1 Pursuant to section 20.6 (1) of the *EPA* and subject to conditions 16.2 and 16.3, 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 of this *Approval*.

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*, or
- b. *Modifications* to the *Facility* that would be subject to the *Environmental Assessment Act*.

16.3 Condition 16.1 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 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, 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(a) 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.

## 18. 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 ensure that the noise emissions from the *Facility* comply with the limits set out in *Ministry Publication NPC-300*.

18.4 The *Company* shall 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*.

## 19. Biofilter Monitoring

19.1 The *Company* shall monitor the physical parameters of the *Biofilter* as outlined in Schedule "G" and provide quarterly reports on the first of March, June, September and December of each year on the results of the monitoring to the *District Manager* .

19.2 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 event 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 *Odour*

*Control System* stack, using portable monitors or calorimetric tubes.

20. Source Testing

20.1 The *Company* shall perform annual *Source Testing* in accordance with the procedure outlined in Schedule "D" of this *Approval*, to determine the rate of emission of the *Test Contaminants* from the *Odour Control System* stack. The first *Source Testing* program shall be conducted within one (1) year of the date of this *Approval*.

21. Odour Control

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 By no later than December 31st, 2018, the *Company* shall install a continuous negative air pressure control and monitoring system in accordance with the *Dust and Odour Management Plan* and Item (5) of Schedule "A"

21.3 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*.

21.4 The *Company* shall implement the Contingency Plans detailed in section 4 of the *Dust and Odour Management Plan* as they pertain to the action(s) the *Company* shall take should a *Loss of Negative Pressure* occur.

21.5 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 maintain these records such that they can be made available to a *Provincial Officer* at any time.

21.6 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*.

21.7 The *Company* shall ensure that the exterior loading bay doors into Bay 1, Bay 2 of the Reception Hall Building and the door to the Tote Receiving Lane 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.

21.8 The *Company* shall ensure that at all times the air from the Reception Hall Building is exhausted through appropriate and fully functional *Odour Control System* approved by the *Ministry*.

22. Odour Monitoring Program

- 22.1 The *Company* shall prepare an Odour Monitoring Program for submission to the *District Manager*, an Odour Monitoring Program.
- 22.2 The Odour Monitoring Program shall be designed to detect and identify any odours originating from the operation of the *Site* which may cause nuisance impacts.
- 22.3 The Odour Monitoring Program shall include a description of the equipment and inspection protocol to ensure that negative pressure is maintained at all times throughout the *Facility*.
- 22.4 The Odour Monitoring Program shall be implemented after written concurrence from the *District Manager* has been received.
- 22.5 In the future, should it be necessary to modify the approved Odour Monitoring Program, the written authorization of the *District Manager* is required prior to the implementation of the proposed changes.

23. Thermal Oxidizers

- 23.1 The *Company* shall operate RTO-1 in such a manner that:
- a. The combustion chamber shall be preheated to a minimum 871 degrees Celsius prior to introducing the emissions for destruction;
  - b. The temperature in the combustion chamber, is maintained at a minimum of 871 degrees Celsius at all times, when RTO-1 is in operation;
  - c. The residence time of the combustion gases in the combustion chamber of RTO-1 shall not be less than 0.75 second at a temperature of 871 degrees Celsius minimum;
  - d. The concentration of *Organic Matter* in the flue gas of RTO-1, being an average of ten measurements taken at approximately one minute intervals, shall not be greater than 100 parts per million by volume, measured on an undiluted bases.
- 23.2 The *Company* shall operate CHAR-1 in such a manner that:
- a. The combustion chamber shall be preheated to a minimum 850 degrees Celsius prior to introducing the emissions for destruction;
  - b. The temperature in the combustion chamber, is maintained at a minimum of 850 degrees Celsius at all times, when CHAR-1 is in operation;
  - c. The residence time of the combustion gases in the combustion chamber of CHAR-1 shall not be less than 2 seconds at a temperature of 850 degrees Celsius minimum;
  - d. The concentration of *Organic Matter* in the flue gas of CHAR-1, being an average of ten

measurements taken at approximately one minute intervals, shall not be greater than 100 parts per million by volume, measured on an undiluted basis.

24. Enclosed Flares

24.1 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;
- b. The residence time of the combustion gases in the combustion chamber of enclosed flare F-1 shall not be less than 0.5 second at a temperature of 850 degrees Celsius minimum;

24.2 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;
- b. The residence time of the combustion gases in the combustion chamber of enclosed flare F-2 shall not be less than 0.75 second at a temperature of 871 degrees Celsius minimum;

25. Continuous Temperature Monitoring

25.1 The *Company* shall continuously monitor the temperature in the combustion chambers of RTO-1, CHAR-1, enclosed flare F-1 and enclosed flare F-2. The temperature monitor and recorder shall comply with the requirements outlined in Schedule "F".

26. Documentation Requirements

26.1 The *Company* shall maintain an up-to-date *Log*.

26.2 No later than March 31 of 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.

26.3 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*.

26.4 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.

26.5 Condition 26.1 and 26.2 do not apply if condition 16.1 has expired.



27. Operation and Maintenance - Air and Noise

- 27.1 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*.
- 27.2 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*.
- 27.3 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.
- 27.4 The *Company* shall ensure that all *Processes with Significant Environmental Aspects* are operated and maintained in accordance with this *Approval*, the operation procedures and maintenance programs.

28. Record Keeping Requirements - Air and Noise

- 28.1 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.
- 28.2 Unless otherwise specified in this *Approval*, the *Company* shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this *Approval*, including,
- a. a copy of the *Original ESDM Report* and each updated version;
  - b. a copy of each version of the *Acoustic Assessment Report*;
  - c. supporting information used in the emission rate calculations performed in the *ESDM Reports* and *Acoustic Assessment Reports*;
  - d. the records in the *Log*;
  - e. copies of each *Written Summary Form* provided to the *Ministry* under condition 12.1 of this *Approval*;
  - f. records of maintenance, repair and inspection of *Equipment* related to all *Processes with Significant Environmental Aspects*;
  - g. all records produced by *Source Testing*;

- h. all records produced by the continuous monitoring system;
- i. all records related to environmental complaints made by the public as required by condition 10 of this *Approval*.

29. Revocation of Previous s. (9) EPA Approvals

29.1 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

30. Service Area

- 30.1 The service area of the *Facility* is limited to waste generated in the Province of Ontario.
- 30.2 Notwithstanding condition 30.1, the *Facility* may receive *Organic Feedstock* that is sealed and requiring de-packaging from outside of Ontario.

31. Hours of Operation

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

32. Signs

32.1 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*.

33.2 The *Company* shall ensure that appropriate signs are posted at the *Site* clearly identifying the feedstocks and stating warnings about the nature of the feedstocks and any possible hazards.

### 33. Site Security

33.1 All handling of the *Organic Feedstock* at the *Site* shall at all times be undertaken or supervised by *Trained Personnel*.

33.2 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.

33.3 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.

### 34. Approved Feedstock Types

34.1 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;

iv. materials typically utilized as animal feed;

e. Mineral ingredients for *Fertilizer* enhancement.

34.2 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.

34.3 The *Company* shall not accept any *Organic Feedstock* with the intent to process the waste on behalf of another facility without prior written consent from the *District Manager* .

35. *Organic Feedstock Receiving Rates and Storage*

35.1 The total annual amount of *Organic Feedstock* approved to be accepted at the *Site* shall not exceed 195,000 tonnes per year.

35.2 The total daily amount of *Organic Feedstock* approved to be accepted at the *Site* shall not exceed 625 tonnes per day, averaged annually.

35.3 With the exception of *Organic Feedstock* that requires de-packaging, solid *Organic Feedstock* accepted at the *Site* shall be temporarily stored in two (2) in-ground Reception Pits located within the confines of the Reception Hall Building prior to being processed and transferred to the appropriate reception tank.

35.4 *Organic Feedstock* approved to be stored at the *Site* is subject to the following limitations:

- a. No more than 260 cubic metres of *Organic Feedstock* shall be stored in the Reception Tank #1 at the *Site* at any one time.
- b. No more than 100 cubic metres of *Organic Feedstock* shall be stored in the Reception Tank #2 at the *Site* at any one time.
- c. No more than 1,650 cubic metres of *Organic Feedstock* shall be stored in the Reception Tank #3 at the *Site* at any one time.
- d. No more than 1,650 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 1,100 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 5,900 cubic metres of *Organic Feedstock* being processed shall be contained within the primary digester #1, identified as Anamix Tank #1.
- h. No more than 5,900 cubic metres of *Organic Feedstock* being processed shall be contained within the primary digester #2, identified as Anamix Tank #2;
- i. No more than 4,412 cubic metres of *Organic Feedstock* being processed shall be contained within the primary digester #3, identified as Anamix Tank #3; and

- j. No more than 2,400 cubic metres of *Organic Feedstock* being processed shall be contained within each secondary digester tank identified as the Digestate Storage Tank.
- 35.5 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".
- 35.6 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.
- 35.7 If at any time, the *Organic Feedstock* requiring de-packaging becomes odorous, it shall be moved indoors immediately for processing.
- 35.8 Wastewater storage at the *Site* is subject to the following limitations:
- a. No more than 22.7 cubic metres of liquid effluent from the Digestate dewatering operations shall be temporarily stored for up-to 24 hours in the Centrate Sump located within the confines of the Digestate Management Building, prior to its transfer to the Pre-Aeration Tank.
  - b. No more than 3,030 cubic metres of liquid effluent from the Centrate Sump shall be contained within one (1) storage tank, identified as Pre-Aeration Tank, located within the outdoor tank farm shown on the drawings included in the supporting documentation listed in the attached Schedule "A".
  - c. No more than 1,890 cubic metres of liquid effluent from the Pre-Aeration Tank or directly from the Digestate dewatering operations shall be contained within each of the two (2) storage tanks, identified as Anoxic Tanks #1 and #2, located within the outdoor tank farm shown on the drawings included in the supporting documentation listed in the attached Schedule "A".
  - d. No more than 130 cubic metres of liquid effluent from the Anoxic Tanks #1 and #2 or directly from the Pre-Aeration Tank shall be contained within the MBR System, located within the outdoor tank farm shown on the drawings included in the supporting documentation listed in the attached Schedule "A".
  - e. No more than 150 cubic metres of liquid effluent from the MBR System shall be contained within one (1) storage tank, identified as Non-Potable Holding Tank, located within the outdoor tank farm shown and described in the supporting documentation listed in the attached Schedule "A".
  - f. 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.

35.9 Solid *Residual Waste* storage at the *Site* is subject to the following limitations:

- a. No more than 20 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* shall be stored in one (1)-23 cubic metres (30 cubic yards) lugger bin located within the confines of Reception Hall Building and in two (2)-2 cubic metres (2 cubic yards) lugger bins located within the confines of the Digestate Management Building;
- c. packaging material and other recyclable waste generated from any de-packaging of *Organic Feedstock* may be stored outdoors in roll-off bins.

35.10 No outside waste storage other than that described above is approved under this *Approval*.

35.11 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.

35.12 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*.

### 36. Incoming Feedstock Receipt and Handling

36.1 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*.

36.2 *Trained Personnel* shall inspect the required documentation prior to acceptance of the incoming *Organic Feedstock* at the *Site*.

36.3 *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*.

36.4 The *Company* shall only accept the incoming *Organic Feedstock* that is delivered in vehicles that have been approved as required by the *Ministry*.

36.5 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.

- 36.6 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.
- 36.7 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.
- 36.8 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.

37. Rejected Waste Handling

- 37.1 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*.
- 37.2 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.
- 37.3 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*.

38. Solid Residual Waste Handling

38.1 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".

38.2 The *Company* shall ensure that all vehicles removing solid *Residual Waste* from the *Site* are hard-roofed or are properly covered and washed, if necessary, prior to their departure from the *Site*.

39. Processing Limitations

39.1 The *Company* shall ensure that no more than 1,100 cubic metres of *Organic Feedstock* is being processed in the T.A.R. Tank.

39.2 The *Company* shall ensure that no more than 5,900 cubic metres of *Organic Feedstock* is being anaerobically digested in the Primary Digester #1, identified as Anamix Tank #1.

39.3 The *Company* shall ensure that no more than 5,900 cubic metres of *Organic Feedstock* is being anaerobically digested in the Primary Digester #2, identified as Anamix Tank #2.

39.4 The *Company* shall ensure that no more than 4,412 cubic metres of *Organic Feedstock* is being anaerobically digested in the Primary Digester #3, identified as the Anamix Tank #3.

39.5 The *Company* shall ensure that no more than 2,400 cubic metres of *Organic Feedstock* is being anaerobically digested in the Secondary Digester, identified as Digestate Storage Tank.

39.6 The *Company* shall ensure that all Digestate processing is undertaken within the confines of the Digestate Management Building.

39.7 The *Company* shall ensure that all handling of the dust generated within the Digestate Management Building is undertaken within the confines of the Digestate Management Building, the enclosed dust collection equipment and the enclosed conveyors.

39.8 With the exception of *Fertilizer* that has been sealed into supersacks, the *Company* shall ensure that loading of the *Fertilizer* or the solid *Processed Material* into vehicles for transportation from the *Site* is undertaken within the confines of the Digestate Management Building and as described the supporting documentation listed in the attached Schedule "A".

40. Incoming Waste Quality Criteria

40.1 The incoming *Organic Feedstock* shall meet the non-hazardous waste criteria and parameters listed in *Reg. 347*.

40.2 Notwithstanding the requirements in condition 40.1, the incoming *Organic Feedstock* , other than



the waste exempted in *Reg. 347*, shall not exceed the concentrations of the following metals:

Table One

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 solids dry weight of 10,000 milligrams or more 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

41. Feedstock Quality Control

41.1 Quality Control Monitoring of incoming *Organic Feedstock* at the *Site*:

- a. The *Company* shall establish a sampling/testing procedure to undertake the incoming *Organic Feedstock* characterization following its receipt at the *Site*.
- b. This procedure shall ensure that representative samples of the incoming *Organic Feedstock* are collected in sufficient numbers and that the samples are properly preserved and tested so that reliable data on the *Organic Feedstock* characteristics is collected.
- c. This procedure shall comply with the *Ministry's* regulatory requirements for sampling and testing of waste and it shall include the rationale for the proposed methods.
- d. This procedure 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.
- e. Should results of testing of the incoming *Organic Feedstock* fail to meet the criteria specified in this *Approval*, the incoming *Organic Feedstock* shall be handled in accordance with the *Emergency Response and Contingency Plan* .

#### 41.2 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  $2 \times 10^6$  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*.

#### 42. Process Monitoring

- 42.1 The *Company* shall monitor the temperature in the T.A.R. Tank in accordance with the supporting documentation listed in the attached Schedule "A".

#### 43. End Use of Processed Material

- 43.1 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*.
- 43.2 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.

- 43.3 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*.
- 43.4 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.
- 43.5 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.

#### 44. Wastewater Management

- 44.1 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 collected in two (2) grit sumps located in each of the *Organic Feedstock* receiving lanes.
- 44.2 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 two (2) grit sumps, with one sump located in the fertilizer load out area and the second one located in the Digestate Management Building processing area.
- 44.3 The maximum holding capacity of each grit sump detailed above shall not exceed 10 cubic metres.
- 44.4 The wastewater collected in the grit sumps shall be pumped to the Centrate Sump, as needed, to ensure that the sumps do not become a source of fugitive odour emissions.
- 44.5 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.
- 44.6 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".
- 44.7 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.

45. Preventative Maintenance Program

45.1 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.

46. Nuisance Impact Control & Housekeeping

46.1 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*.

46.2 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.

46.3 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*.

46.4 The *Company* shall take all practical steps to prevent the escape of litter from the *Site*;

46.5 The *Company* shall pick up litter around the *Site* on a regular basis.

46.6 The *Company* shall implement necessary housekeeping procedures to eliminate sources of attraction for vermin and vectors; and

46.7 The *Company* shall if necessary, hire a qualified, licensed pest control professional to design and implement a pest control plan for the *Site*.

46.8 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.

46.9 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*.

47. Emergency Response and Contingency Plan

47.1 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 47.1(d) and 47.1(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*.
- 47.2 The *Emergency Response and Contingency Plan* shall be reviewed on an annual basis and updated, if necessary. The revised version of the *Emergency Response and Contingency Plan* shall be submitted to the *District Manager*, the local Municipality and the Fire Department for comments and concurrence before implementation.
- 47.3 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.
- 47.4 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*.
- 47.5 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.

47.6 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.

48. Staff Training

48.1 All operators of the *Site* shall be trained with respect to the following:

- 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. emergency first-aid information;
- g. relevant waste management legislation and regulations, including the *EPA* and *Reg. 347*;
- h. recording procedures as required by this *Approval*;
- i. equipment and site inspection procedures, as required by this *Approval*;
- j. nuisance impact control & housekeeping procedures, as required by this *Approval*, the *Dust and Odour Management Plan* and the *Odour Control Plan*; and
- k. procedures for recording and responding to public complaints.

48.2 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 48.1 above are changed or updated.

48.3 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 of person who has been trained; and
- c. description of the training provided.

#### 49. Daily Inspections

49.1 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.

49.2. 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.

49.3 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 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.

#### 50. Record Keeping and Retention - Waste

50.1 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.;
- l. 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 Storage Tank into the Anamix Tank #1, Anamix Tank #2, or Anamix Tank #3 for re-processing.

50.2 The *Company* shall retain all records pertaining to waste characterization required by this *Approval* for a minimum of three (3) years.



50.3 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.

50.4 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.

50.5 The *Company* shall establish and maintain a written or digital record of all monitoring activities at the *Site* as required by this *Approval*.

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

50.7 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*.

## 51. Closure Plan

51.1 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.

51.2 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

##### 52. General - Industrial Sewage Works

52.1 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, Item (7) of Schedule "A" and any other supporting documents, plans and specifications that may form part of this *Approval*.

52.2 This *Approval* approves the construction of the following, which comprise the *Works* at the *Site*:

a stormwater management and spill containment facility to service the Site's 4.27-hectare drainage area, designed to provide quantity and quality control of stormwater run-off by attenuating stormwater flows from storm events up to 1:100 years return frequency to pre-development levels, discharging to an existing municipal storm sewer which eventually drains to Tributary H of the Dingman Creek Watershed, consisting of the following:

##### Spill Containment Facility

- a. one (1) spill containment facility with a total storage volume of 7,218 cubic meters, a depth of 1.13 to 2.25 meters from the top berm elevation of 265.10 meters, 2H:1V side slopes, an impervious native soil liner, and a 7.5 m wide emergency spill weir at an elevation of 265.01 m, designed to contain emergency spills from approximately ten (10) process materials and process by-products storage tanks;
- b. one (1) 0.7 cubic metre capacity groundwater collection well collecting groundwater from a weeping tile system around each tank foundation, 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;
- c. one (1) 7.7 cubic metres capacity concrete sump located at the north side of the spill containment facility, equipped with a 9.5 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
- d. all controls and associated appurtenances.

##### Stormwater Management Facility

- e. one (1) approximately 71.5 meters long 200 millimetres diameter storm sewer extending

from manhole CBMH12 to manhole CBMH13 and one (1) approximately 33.4 meters long 300 millimetres diameter storm sewer extending from manhole CBMH13 to manhole CBMH, and one (1) approximately 42.1 meters long 300 millimetres diameter storm sewer extending from manhole CBMH to manhole MH9 collecting stormwater run-off from the southern and eastern parts of the site, discharging through approximately 23.4 meters long 300 millimetres diameter storm sewer to a stormwater management pond described below;

- f. one (1) approximately 56.5 meters long 200 millimetres diameter storm sewer extending from catch basin CB6 to manhole CBMH7, one (1) approximately 59.6 meters long 250 millimetres diameter storm sewer extending from manhole CBMH7 to manhole CBMH8, and one (1) approximately 36.4 meters long 250 millimetres diameter storm sewer extending from manhole CBMH8 to manhole MH9 collecting stormwater run-off from the southern and western, parts of the site, discharging through approximately 23.4 meters long 300 millimetres diameter storm sewer to a stormwater management pond described below;
- g. one (1) approximately 22.5 meters long 250 millimetres diameter storm sewer extending from catch basin CB15 to manhole MH9 collecting stormwater run-off from the northern parts of the site, discharging through approximately 23.4 meters long 300 millimetres diameter storm sewer to a stormwater management pond described below;
- h. stormwater management facility (catchment area 4.27 hectares with 56% imperviousness): One (1) dry stormwater management pond with a 1.0 m deep x 25.0 m long sediment forebay at the southeast inlet and a 1.2 m deep x 22 m long sediment forebay at the southwest inlet, providing a total storage volume of 2,418 cubic metres at a pond elevation of 264.45 m, complete with an outlet structure consisting of a 150 millimetre diameter outlet pipe at an elevation of 262.77 m and a 2 metre wide rectangular overflow weir at an elevation of 263.35 m, allowing a maximum discharge of 43.9 litres per second during the 100-year storm event to the oil and grit separator described below;
- 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; and
- j. all associated controls and appurtenances.

### 53. Expiry

- 53.1 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*.

54. Monitoring and Recording - Industrial Sewage

54.1 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:

<b>Table 2 - Effluent Monitoring - (MH18)</b>	
<b>Frequency</b>	Monthly
<b>Sample Type</b>	Grab
<b>Parameters</b>	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.

55. Effluent Objectives

55.1 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.

<b>Table 3 - Effluent Objectives</b>	
<b>Effluent Parameter</b>	<b>Monthly Concentration Objective</b>
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	

55.2 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 discoloration on the receiving waters.

55.3 In the event of an exceedance of an objective in condition 55.1, 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.

55.4 If the *District Manager* deems the remedial actions taken as per condition 55.3 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.

55.5 The *Company* shall include in all reports submitted in accordance with Conditions 10, a summary of the efforts made and results achieved under this Condition.

55.6 By no later than October 31, 2022, the *Company* shall submit a letter to the *Director* confirming the updated dissolved oxygen concentration objective. This letter shall include supporting confirmation from the *Ministry* 's Technical Support Section.

56. Operation and Maintenance of the Industrial Sewage Works

56.1 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.

56.2 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.

56.3 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.

56.4 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 5. 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
<i>E coli</i>	1000 CFU/100 mL
pH of the effluent maintained within the range of 6.0 to 9.5	

- 56.5 In the event of an exceedance of a trigger level for any of the trigger parameters in condition 56.4, 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;
  - 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.
- 56.6 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.
- 56.7 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;
- 56.8 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.
- 56.9 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 - Imported biosolids for trial use in BioChar process

57. Temporary Provision

- 57.1 The *Company* is approved to conduct the research and development program (the "program") detailed in the application listed as Item 24 of Schedule "A".
- 57.2 Char Technologies, 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.



### **Part Three: Schedules**

#### **1. Schedule "A": Supporting Documentation**

1. Environmental Compliance Approval Application, dated August 24, 2017, certified by Chris Guillon and submitted by the *Company*.
2. Emission Summary and Dispersion Modelling Report, prepared by Andrew Chan, Pinchin Ltd. and dated April 6, 2018.
3. *Acoustic Assessment Report*, prepared by Weidong Li, Pinchin Ltd. and dated December 19, 2017.
4. *Design and Operations Report* dated September 20, 2018, prepared by Stormfisher Environmental Ltd. and including all drawings and appendices.
5. *Dust and Odour Management Plan*, dated September 20, 2018, prepared by Stormfisher Environmental Ltd. and including all drawing and appendices.
6. 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.
7. Report dated March 1, 2018, prepared by Walter Fedy Partnership, Engineers and Project Managers, Kitchener, Ontario including all attached information, drawings and appendices.
8. Letter dated March 29, 2018, prepared by StormFisher Environmental Ltd., including all attached information and appendices.
9. Additional information provided by Andrew Chan, Pinchin Ltd. in emails dated April 26, 2018, August 7, 2018 and August 8, 2018.
10. StormFisher Environmental Servicing and Stormwater Management Design Brief, prepared by WalterFedy and dated April 26, 2018
11. Additional information provided by Brandon Moffatt, StormFisher Environmental Ltd. in an email dated June 22, 2018.
12. 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.

13. 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.
14. Emergency Response and Contingency Plan, rev [02], prepared by Stormfisher Environmental Ltd.
15. 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.
16. 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.
17. Updated *Design and Operations Report* dated March 20, 2020, prepared by Stormfisher Environmental Ltd., included with the ECA application listed as item 12 above, and including all drawings and appendices.
18. 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.
19. 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.
20. 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.
21. 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.
22. E-mail dated July 31, 2020, to Pearce Fallis, StormFisher Environmental Ltd. from Nick Zambito, MECP.
23. E-mail dated August 17, 2020 to David Lee, MECP from Pearce Falls, StormFisher Environmental Ltd.
24. 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.

25. Environmental Compliance Approval Application, dated July 17, 2022, signed by Paula Stanley, Director of Regulatory Compliance, Stormfisher Environmental Ltd., including all attached supporting documentation.

2. Schedule "B": Equipment with Specific Operational Limits

1. one (1) natural gas-fired regenerative thermal oxidizer, identified as RTO-1, having a thermal input rating of 540,000 kilojoules per hour, discharging to the atmosphere at a volumetric flow rate of 0.3 cubic metre per second, at a temperature of 150 degrees Celsius, through a stack having an exit diameter of 0.25 metre, extending 10.0 metres above grade;
2. one (1) natural gas-fired regenerative thermal oxidizer, identified as CHAR-1, having a thermal input rating of 4,200,000 kilojoules per hour, discharging to the atmosphere at a volumetric flow rate of 5.5 cubic metres per second, at a temperature of 400 degrees Celsius, through a stack having an exit diameter of 0.61 metre, extending 1.4 metres above the roof and 9.0 metres above grade;
3. 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;
4. 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. Schedule "C": Test Contaminants

1. Odour
2. Total Reduced Sulphur Compounds

4. Schedule "D": Source Testing Procedure

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 accepted 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, District Manager, and 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 on the *Source Testing* to the *Manager, District Manager, and 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. records of weather conditions such as ambient temperature and relative humidity, at the time of the *Source Testing*;
  - c. records of operating conditions at the time of *Source Testing* including but not limited to the following:
    - i. the receipt rates of the 3 categories of *Organic Feedstock*;
    - ii. the operational conditions of the anaerobic digesters; and
    - iii. the operational parameters of the *Odour Control System*;
  - d. results of the *Source Testing*, including the emission rates and emission concentrations of the *Test Contaminants*;
  - e. a tabular comparison of *Source Testing* results for the *Test Contaminants* to original emission estimates described in the *Company's* application and the *ESDM Report*; and
  - f. 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. If the *Source Testing* results are higher than the emission estimates in the *Company's* *ESDM Report*, the *Company* shall update their *ESDM Report* in accordance with section 26 of *O.Reg. 419/05* with the results from the *Source Testing* report and make these records available for review by staff of the *Ministry* upon request. The updated *Emission Summary Table* from the updated *ESDM Report* shall be submitted with the report on the *Source Testing*.
8. The *Director* may not accept the results of the *Source Testing* if:

- a. the *Source Testing Code* or requirements of the *Manager* were not followed;
  - b. the *Company* did not notify the *Manager, District Manager* and *Director* of the *Source Testing*; or
  - c. the *Company* failed to provide a complete report on the *Source Testing*.
9. If the *Director* does not accept the results of the *Source Testing*, the *Director* may require re-testing. If re-testing is required, the *Pre-Test Plan* strategies need to be revised and submitted to the *Manager* for approval. The actions taken to minimize the possibility of the *Source Testing* results not being accepted by the *Director* must be noted in the revision.
  10. The *District Manager* may alter the requirements of subsequent *Source Testing* if the result of the *Source Testing* indicate that the environmental impact from the *Test Contaminants* are insignificant or the emissions from the *Odour Control System* stack 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:

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

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

$X_{60 \text{ min}}$  = 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
Type:	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 15.1 is included to require the *Approval* holder to build, operate and maintain the *Facility* in accordance with the Supporting Documentation in Schedule "A" considered by the *Director* in issuing this *Approval*.

Conditions 16.1 through 18.5 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 19.1, 19.2 and 20.1 are included to require the *Company* to gather accurate information so that compliance with the operating requirements of this *Approval* can be verified.

Conditions 21.1 through 22.5 are included to provide minimum operating and performance requirements and gather information to prevent an adverse effect resulting from the operation of the *Facility*.

Conditions 23.1 through 24.2 are included to emphasize that the *Equipment* must be operated and maintained according to a procedure that will result in compliance with the *EPA*, the *Regulations* and this *Approval*.



Condition 25.1 is included to require the *Company* to gather accurate information so that compliance with the operating requirements of this *Approval* can be verified.

Conditions 26.1 through 26.5 are 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*.

Conditions 27.1 through 27.4 are included to require the *Company* to properly operate and maintain the *Processes with Significant Environmental Aspects* to minimize the impact to the environment from these processes.

Conditions 28.1 and 28.2 are 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 29.1 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 30.1 and 30.2 are included to specify the approved service area of the *Site* .

Conditions 31.1, 31.2 and 31.3 are 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 32.1 and 32.2 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 33.1, 33.2 and 33.3 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 34.1 and 34.2 are included to specify the type of *Organic Feedstock* that may be received at the *Site*.

Conditions 35.1 through 35.12 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 35.4 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 36.1 through 36.4 are included to ensure that only the approved *Organic Feedstock* types are accepted and processed at the *Site*.

Conditions 36.5 and 36.6 are included to ensure that waste is managed in a manner that minimizes potential impacts from fugitive odour emissions.

Conditions 36.7 and 36.8 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 37.1, 37.2 and 37.3 are included to specify the requirements for handling of the *Rejected Waste* that was inadvertently received at the *Site*.

Conditions 38.1, 38.2 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 39.1 through 39.7 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 40.1, 40.2, 41.1 and 41.2 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.

Condition 42.1 is also included to require the *Company* to undertake temperature monitoring of the *Organic Feedstock* undergoing processing within the T.A.R.

Condition 42.1 is also included to require the *Company* to undertake monitoring of the anaerobic digestion processing of the *Organic Feedstock* to ensure that the said processing is carried out as proposed by the *Company* in the supporting documentation listed in the attached Schedule "A".

Conditions 43.1 through 43.5 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 44.1 through 44.7 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 45.1 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 46.1 through 46.9 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 47.1 through 47.6 are ensure that the *Company* is prepared and properly equipped to take action in the event of an emergency situation.

Conditions 48.1, 48.2 and 48.3 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 49.1, 49.2 and 49.3 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 50.1 and 50.7 are included to ensure that detailed records of *Site* activities, inspections, monitoring and upsets are recorded and maintained for inspection and information purposes.

Condition 51.1 and 51.2 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 52.1 and 52.2 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 53.1 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 54.1 through 54.4 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 55.1 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 56.1 through 56.9 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 57.1 through 57.2 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 June 28, 2022**

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  
OLT.Registrar@ontario.ca

and

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

and

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

**\* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or [www.olt.gov.on.ca](http://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 21st day of October, 2022



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

DL/

c: District Manager, MECP London - District

Paula Stanley

pstanley@stormfisher.com

Director of Regulatory Compliance

, StormFisher Environmental Ltd.