

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 8802-BYCKMB

Issue Date: September 22, 2021

Kawartha Ethanol Inc.
6830 Highway 7
Havelock, Ontario
K0L 1Z0

Site Location: 6830 Highway 7
6830 Highway 7 Lot 6, Concession 6 (Havelock)
Havelock-Belmont-Methuen Township, County of Peterborough

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:

Description Section

A fuel grade ethanol production facility, consisting of the following processes and support units:

- mash cooking and conversion;
- fermentation;
- carbon dioxide scrubbing;
- distillation and dehydration;
- stillage separation;
- stillage evaporation;
- drying and VOC destruction;
- ethanol storage and transportation;
- DDGS storage and transportation;
- utilities (including boilers No. 1 to 9);
- one (1) regenerative thermal oxidizer fired by natural gas with a maximum heat input of approximately 5.28 million kilojoules per hour, exhausting into the atmosphere at a volumetric flow rate of approximately 18.9 actual cubic metres per second through a stack (EP19), having an exit diameter of 1.17 metres and extending 18.3 metres above grade, serving the DDGS drying operations;
- one (1) fermentation (CO₂/vent) scrubber (EP11) with a single packed bed, operating with a

maximum pressure drop of 1.2 kilopascals and a maximum fresh process water flow rate of 2.1 litres per second, exhausting to the atmosphere at an approximate volumetric flow rate of 7.14 cubic metres per second, serving the following operations:

- o slurry tank;
- o yeast tank;
- o liquefaction tank;
- o beer column;
- o stripper;
- o rectifier;
- o evaporator system;
- o whole stillage tank;
- o thin stillage tank;
- o syrup tank;
- o centrifuges No. 1 and No. 2;
- o molecular sieves No. 1 and No. 2;
- o process condensate tank;
- o 200 proof condenser;
- o fermenters No. 1, 2, 3, 4, 5, 6, 7 and 8;
- o beer well;

including the Equipment, processes and any other ancillary and support processes and activities, operating at a maximum annual production rate of up to 150 million litres of fuel grade ethanol per year and 100,000 tonnes (dry basis) or 290,000 tonnes (wet basis) of distillers grain with solubles (DDGS) per year, discharging to the air as described in the Original ESDM Report.

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

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 Trevor Copeland and Trevor Ross, Cambium Inc., dated January 15, 2021, and 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 5 of this Approval;

4. "Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarising the results of the Acoustic Assessment Report, up-dated as required by the Documentation Requirements conditions of this Approval;
5. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the Performance Limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233;
6. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233;
7. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility;
8. "Adjacent Facility" means the Drain Bros. Excavating Limited biodiesel production and CHP facility located at 6830 Highway 7, Havelock, Ontario and the Drain Bros. Excavating Limited quarrying and aggregate production facility located at 6830 Highway 7, Havelock, Ontario;
9. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
10. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
11. "Company" means Kawartha Ethanol Inc. 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;
12. "Compound of Concern" means a contaminant 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;
13. "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;
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. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
17. "Environmental Assessment Act" means the *Environmental Assessment Act*, R.S.O. 1990, c.E.18;
18. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
19. "Equipment" means the Company's equipment or processes described in the ESDM Report, the Acoustic Assessment Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
20. "Equipment with Specific Operational Limits" means any Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators (including the Thermal Oxidizer) or any other Equipment (including fermentation (CO₂) scrubber), that is specifically referenced in any published Ministry document, except "Guideline A-9" for large boilers (including Boilers No. 1 to 9), 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;
21. "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;
22. "expanded Facility" means the Facility with the annual Facility Production Limit of fuel grade ethanol increased to 150 million litres of fuel grade ethanol per year;
23. "Facility" means the entire Kawartha Ethanol Inc. ethanol production operation located on the Property where the Equipment is located;
24. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
25. "Guideline A-9" means Ministry Guideline A-9, titled "NO_x Emissions from Boilers and Heaters", dated March 2001;
26. "Independent Acoustical Consultant" means an Acoustical Consultant not representing the Company, and not involved in the noise impact assessment or the design/implementation of noise control measures for the Facility/Equipment. The Independent Acoustical Consultant shall not be retained by the consultant involved in the noise/vibration impact assessment or the design/implementation of noise/vibration control measures for the Facility/Equipment;
27. "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 2;

28. "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;
29. "Ministry" means the ministry of the Minister;
30. "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;
31. "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. It also means the Noise Control Measures, as outlined in Table 4 of the Acoustic Assessment Report dated January 15, 2021, and signed by Trevor Copeland and Trevor Ross, Cambium Inc., and detailed in Schedule E of this Approval;
32. "Odour Unit" means the number of unit volumes of odourless gas required to dilute one unit volume of odorous gas to reach the odour threshold;
33. "Odour Threshold Values" means odour unit value at which 50 per cent of the population detects an odour;
34. "Organic Matter" means organic matter having a carbon content expressed as equivalent methane;
35. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution – Local Air Quality;
36. "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 Sadie Bachynski, P.Eng. / Cambium Inc. and dated January 13, 2021 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
37. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
38. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
39. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
40. "Processes with Significant Environmental Aspects" means the Equipment which, during regular

operation, would discharge one or more contaminants 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;

41. "Professional Engineer" means a Professional Engineer defined under the Professional Engineers Act, R.S.O. 1990, as amended;
42. "Property" means, in accordance with s. 4, O. Reg. 419/05, the single property occupied by Drain Bros. Excavating Limited and Kawartha Ethanol Inc., as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
43. "Publication NPC-103" means Publication NPC-103, Procedures, August 1978;
44. "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;
45. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
46. "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;
47. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
 - Schedule A - Supporting Documentation;
 - Schedule B - Source Testing Sources and Contaminants;
 - Schedule C - Procedure for Calculating Odour Point of Impingement Concentration;
 - Schedule D - Temperature Monitoring and Recording System Requirements;
 - Schedule E - Noise Control Measures;
48. "Source Testing Code" means the Source Testing Code, Version 2, Report No. ARB-66-80, dated November 1980, prepared by the Ministry, as amended;
49. "Source Testing" means sampling and testing to measure emissions resulting from operating the equipment at a level of typical maximum production within the approved operating range of the Facility, which results in the highest level of contaminant emissions;
50. "Test Contaminants" means the contaminants listed in Schedule B;
51. "Thermal Oxidizer" means the thermal oxidizer described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this

Approval;

52. "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;
53. "Truck(s)" means ethanol tanker truck(s) and/or dump truck(s); and
54. "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

1. GENERAL

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:
 - Schedule A - Supporting Documentation;
 - Schedule B - Source Testing Sources and Contaminants;
 - Schedule C - Procedure of Calculating Odour Point of Impingement Concentration;
 - Schedule D - Temperature Monitoring and Recording System Requirements;
 - Schedule E - Noise Control Measures.

2. LIMITED OPERATIONAL FLEXIBILITY

1. Pursuant to section 20.6 (1) of the EPA and subject to Conditions 2.2 and 2.3 of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are Modifications to the Facility that:
 - a. are within the scope of the operations of the Facility as described in the Description Section of this Approval;
 - b. do not result in an increase of the Facility Production Limit above the level specified in the description Section of this Approval; and
 - c. result in compliance with the performance limits as specified in Condition 4.

2. Condition 2.1 does not apply to,
 - a. the addition of any new Equipment with Specific Operational Limits or to the Modification of any existing Equipment with Specific Operational Limits at the Facility; and
 - b. Modifications to the Facility that would be subject to the Environmental Assessment Act.
3. Condition 2.1 of this Approval shall expire ten (10) years from the date of this Approval, unless this Approval is revoked prior to the expiry date. The Company may apply for renewal of Condition 2.1 of this Approval by including an ESDM Report and an Acoustic Assessment Report that describes the Facility as of the date of the renewal application.

3. REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION

1. Prior to making a Modification to the Facility that satisfies Condition 2.1.a. and 2.1.b., the Company shall prepare a proposed update to the ESDM Report to reflect the proposed Modification.
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.
3. The request required by Condition 3.2 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.
4. If the request required by Condition 3.2 is a result of a proposed Modification described in

Condition 3.1, 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.

5. If a request is required to be made under Condition 3.2 in respect of a proposed Modification described in Condition 3.1, the Company shall not make the Modification mentioned in Condition 3.1 unless the request is approved in writing by the Director.
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.
7. The re-submission mentioned in Condition 3.6 shall be deemed a new submission under Condition 3.2.
8. If the Director approves the request, the Company shall update the ESDM Report to reflect the Modification.
9. Condition 3 does not apply if Condition 2.1 has expired.

4. PERFORMANCE LIMITS

1. Subject to Condition 4.2, 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.
2. Condition 4.1 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.

3. The Company shall ensure that the Thermal Oxidizer is designed and operated to comply with the following requirements:
 - a. the combustion chamber of the Thermal Oxidizer shall be preheated to a minimum of 871 degrees Celsius, as measured by the continuous monitoring and recording system, prior to introducing the process exhaust gases;
 - b. the temperature in the combustion chamber of the Thermal Oxidizer, is maintained at a minimum of 871 degrees Celsius, as measured by the continuous monitoring and recording system, at all times, when the Thermal Oxidizer is in operation;
 - c. the residence time of the combustion gases in the combustion chamber of the Thermal Oxidizer shall not be less than 0.75 seconds at a temperature of 871 degrees Celsius minimum; and
 - d. the concentration of Organic Matter in the undiluted gas emitted from the Thermal Oxidizer, being an average of ten measurements taken at approximately one minute intervals, shall not be greater than 100 parts per million by volume.
4. The Company shall ensure that the design and operation of the expanded Facility comply with the following requirements:
 - a. the Company shall ensure that the 10-minute average concentration of odour at the most impacted Sensitive Receptor, resulting from the operation of the expanded Facility, shall not exceed 1.0 Odour Unit; and
 - b. the Company shall demonstrate compliance with the Odour Performance Limit set out in Condition Number 4.4.a in accordance with the methodology in Schedule C.
5. The Company shall:
 - a. at all times operate the Equipment/Facility in accordance with the Acoustic Assessment Report dated January 15, 2021, and signed by Trevor Copeland and Trevor Ross, Cambium Inc.;
 - b. implement the Noise Control Measures, as outlined in the Acoustic Assessment Report dated January 15, 2021, and signed by Trevor Copeland and Trevor Ross, Cambium Inc. and detailed in the Schedule E of this Approval;
 - c. ensure that any and all Trucks arrive at and depart from the Facility in accordance with Schedule E of this Approval;
 - d. ensure, subsequent to the implementation of all Noise Control Measures for the Facility and Adjacent Facility, as detailed in Table 4 of the Acoustic Assessment Report, that the combined noise emissions from the Facility and Adjacent Facility comply with the limits set

out in Ministry Publication NPC-300; and

- e. ensure that all Noise Control Measure, are properly maintained and continue to provide the acoustical performance outlined in the Acoustic Assessment Report.
6. The Company shall ensure that the combined vibration emissions from the Facility and Adjacent Facility comply with the limits set out in Ministry Publication NPC-207.
7. The Company shall operate any Equipment with Specific Operational Limits approved by this Approval in accordance with the Original ESDM Report.

5. DOCUMENTATION REQUIREMENTS

1. The Company shall maintain an up-to-date Log.
2. No later than March 31 in each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
3. While preparing, or proposing to update or updating the ESDM Report and the Acoustic Assessment Report, the Company shall consider the most current information from the Adjacent Facility.
4. 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.
5. The Company shall, within three (3) months after the expiry of Condition 2.1 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 2.1 of this Approval expired.
6. Conditions 5.1 and 5.2 do not apply if Condition 2.1 has expired.

6. REPORTING REQUIREMENTS

1. Subject to Condition 6.2, the Company shall provide the Director no later than June 30 of each year, a Written Summary Form to be submitted through the Ministry's website that shall include the following:
 - a. 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;
 - b. a summary of each Modification satisfying Condition 2.1.a. and 2.1.b. that took place in the previous calendar year that resulted in a change in the previously calculated concentration at a 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.

2. Condition 6.1 does not apply if Condition 2.1 has expired.

7. OPERATION AND MAINTENANCE

1. The Company shall prepare and implement, not later than three (3) months from the date of this Approval, operating procedures and maintenance programs for all Processes with Significant Environmental Aspects, which shall specify as a minimum:
 - a. frequency of inspections and scheduled preventative maintenance;
 - b. procedures to prevent upset conditions;
 - c. procedures to minimize all fugitive emissions;
 - d. procedures to prevent and/or minimize odorous emissions;
 - e. procedures to prevent and/or minimize noise emissions;
 - f. procedures for record keeping activities relating to the operation and maintenance programs;
 - g. procedures for recording and responding to environmental complaints relating to operation of the expanded Facility; and
 - h. list of trained personnel responsible for the operation and maintenance of the expanded Facility.
2. The Company shall ensure that all Processes with Significant Environmental Aspects are operated and maintained in accordance with this Approval, the operating procedures and maintenance programs.
3. The Company shall prepare, before commencement of operation of the expanded Facility, and update as necessary a best management practices plan or similar such program for the control of minor odour emissions, fugitive odour emissions and fugitive dust emissions to provide effective preventative/control measures to any potential sources of minor odour emission and fugitive odour and dust emissions resulting from the operation of the expanded Facility. This best management practices plan shall include, but not be limited to:
 - a. identification of the sources of minor odour emissions, fugitive odour emissions and fugitive dust emissions;
 - b. potential causes for high odour/dust emissions resulting from these sources;
 - c. preventative and control measures in place to minimize the likelihood of high odour/dust emissions from the sources of emissions identified above. Details of the preventative and

control measures shall include:

- i. a description of the control equipment;
 - ii. a description of the preventative procedures to be implemented; and/or
 - iii. the frequency of occurrence of periodic preventative activities;
- d. training of Facility personnel; and
- e. inspection and maintenance procedures and monitoring initiatives to ensure effective implementation of the preventative and control measures.
4. The Company shall provide written documentation of specific preventative and control measures described in the best management practices plan is implemented. The Company shall record, as a minimum:
- a. the date when each new preventative measure or operating procedure to minimize emissions is implemented, including a description of the preventative measure or operating procedure; and
 - b. each periodic activity conducted to minimize emissions.
5. The Company shall implement the Complaint Response and Recording Procedure, the Operating and Maintenance Programs and the best management practices plan for the expanded Facility.
6. The Company shall submit a summary of activities, conducted during the year under the best management practices plan, as part of the Written Summary Form required by Condition No. 6.1.

8. COMPLAINTS RECORDING AND REPORTING

1. If at any time, the Company receives an environmental complaint from the public regarding the operation of the Equipment approved by this Approval, the Company shall take the following steps:
 - a. Record and number each complaint, either electronically or in a log book. The record shall include the following information: the time and date of the complaint and incident to which the complaint relates, the nature of the complaint, wind direction at the time and date of the incident to which the complaint relates and, if known, the address of the complainant.
 - b. Notify the District Manager of the complaint within two (2) business days after the complaint is received, or in a manner acceptable to the District Manager.
 - c. Initiate appropriate steps to determine all possible causes of the complaint, and take the necessary actions to appropriately deal with the cause of the subject matter of the complaint.

- d. Complete and retain on-site a report written within five (5) business days of the complaint date. The report shall list the actions taken to appropriately deal with the cause of the complaint and set out steps to be taken to avoid the recurrence of similar incidents.

9. RECORD KEEPING REQUIREMENTS

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.
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 6.1 of this Approval;
 - f. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects; and
 - g. all records related to environmental complaints made by the public as required by Condition 8 of this Approval.

10. MONITORING

1. The Company shall monitor the emissions and operation of the expanded Facility as follows:
 - a. The Company shall perform Source Testing to determine:
 - i. the rate of odour emission from the exhaust stacks listed in Schedule B, and any additional sources identified as odour emission sources that have a potential of significant impact at the off site Sensitive Receptors, and Source Testing can be conducted on the emission source, after the commencement of the expanded Facility operation; and
 - ii. the rate of emission of each Test Contaminant from their respective emission sources as

listed in Schedule B, after the commencement of the expanded Facility operation.

- b. The Company shall repeat the Source Testing, required by Condition No. 10. 1. a. i., annually from the date of the first Source Testing for two (2) years, in accordance with the procedures stated in this Approval, unless the frequency is reduced in writing by the District Manager.
- c. The Company may conduct the Source Testing required by Condition No. 10. 1. a. ii. once only.
- d. For the first Source Testing of any source, the Company shall submit, to the Manager a test protocol, including the Pre-Test Information for the Source Testing required by the Source Testing Code. The Company shall finalize the test protocol in consultation with the Manager. The Company shall submit the test protocols in accordance with the following timelines:
 - i. for Source Testing on the expanded Facility, the Company shall submit the test protocol for the affected sources within one month after the start of operation of the expanded Facility;
 - ii. for Source Testing on any new odour and/or suspended particulate matter emission sources as indicated in Schedule B, the Company shall submit the test protocol within one month after the start of operation of the new emission sources.
- e. For the subsequent Source Testing, the Company shall submit, not later than twelve (12) months after the previous Source Testing, to the Manager a test protocol, including the pre-test Information for the Source Testing required by the Source Testing Code, unless the Manager has determined the Company is not required to submit the test protocol.
- f. The Company shall not commence the Source Testing until the Manager has accepted the test protocol or the Manager has determined the Company is not required to submit the test protocol.
- g. The Company shall complete the first Source Testing required by Condition No. 10. 1. a. not later than two (2) months after the Manager has accepted the test protocol, or six (6) months after the commencement of operation of the expanded Facility, whichever comes later.
- h. For the subsequent Source Testing, the Company shall complete the Source Testing not later than two (2) months after the Manager has accepted the test protocol or the Manager has determined the Company is not required to submit the test protocol.
- i. For each Source Testing, the Company shall notify the District Manager and the Manager 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.
- j. For the first Source Testing, the Company shall submit a report to the District Manager and the Manager 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:

- i. an executive summary;
 - ii. records of operating conditions;
 - iii. results of dispersion calculations for the 10-minute average concentration of odour, at ten (10) most impacted Sensitive Receptors, calculated in accordance with the procedure outlined in Schedule C of this Approval, and based on odour emission rates determined by Source Testing;
 - iv. results of dispersion calculations for the 10-minute average concentration profile of odour, within a 3000-metre radius with appropriate grids, calculated in accordance with the procedure outlined in Schedule C of this Approval, and based on odour emission rates determined by Source Testing;
 - v. the results of dispersion calculations in accordance with O. Reg. 419/05 indicating the maximum concentrations of the Test Contaminants at the Point of Impingement, for the maximum production rate of the expanded Facility, based on contaminant emission rates
 1. determined by Source Testing; and
 2. estimated based on methods accepted by the Ministry for emission sources that have a potential of environmental impact but Source Testing can not be performed.
 - k. For each subsequent annual Source Testing, the Company shall submit a report on odour emission to the District Manager and the Manager not later than three (3) months after completing the Source Testing. The report shall be in the format required by Condition No. 10. 1. j. with exclusion of information required by Condition No. 10. 1. j. v.
 - l. For each Source Testing, the Director may not accept the results of the Source Testing if:
 - i. the Source Testing Code or the requirements of the Manager were not followed;
 - ii. the Company did not notify the District Manager and the Manager of the Source Testing; and
 - iii. the Company failed to provide a complete report on the Source Testing.
 - m. If the Director does not accept the results of the Source Testing, the Director may require re-testing.
2. The Company shall continuously monitor and record the temperature in the combustion chamber of the Thermal Oxidizer, when the Thermal Oxidizer is in operation. The temperature monitor

and recorder shall comply with the requirements outlined in the attached Schedule D.

11. ACOUSTIC AUDIT

1. The Company shall carry out Acoustic Audit measurements on the actual combined noise emissions due to the operations of the Facility and Adjacent Facility. The Company:
 - a. shall carry out Acoustic Audit measurements in accordance with the procedures in Publication NPC-103; and
 - b. shall submit an Acoustic Audit Report on the results of the Acoustic Audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Publication NPC-233, to the District Manager and the Director, not later than nine (9) months after fully implementing all Noise Control Measures for the Facility and Adjacent Facility as detailed in the Acoustic Assessment Report dated January 15, 2021, and signed by Trevor Copeland and Trevor Ross, Cambium Inc. and detailed in Schedule E of this Approval.
2. The Director:
 1. may not accept the results of the Acoustic Audit if the requirements of Ministry Publication NPC-233 were not followed; and
 2. may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

12. REVOCATION OF PREVIOUS APPROVALS

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.

SCHEDULE A

Supporting Documentation

1. Environmental Compliance Approval Application, dated November 28, 2019, signed by Darrell Drain, President, and submitted by the Company;
2. Emission Summary and Dispersion Modelling Report, prepared by Sadie Bachynski, P.Eng. / Cambium Inc. and dated January 13, 2021;
3. Acoustic Assessment Report, prepared by Trevor Copeland, P.Eng. and Trevor Ross / Cambium Inc. and dated January 15, 2021;
4. Letter dated October 30, 2020 signed by Darrell Drain, President;
5. December 4, 2020 emails from Steve tenDoeschate / Kawartha Ethanol Inc. and Trevor Copeland, P.Eng. / Cambium Inc. re: confirmation of scope change to application to have entire biodiesel production facility owned by Drain Bros. Excavating Ltd.;
6. Additional information related to air emissions submitted via emails dated January 7, 2021 and January 21, 2021 by Sadie Bachynski, P.Eng. / Cambium Inc. and Cody Givens / Cambium, respectively; and
7. Additional information related to noise emissions submitted via emails dated March 27, 2020, July 6, 2020, August 28, 2020, October 30, 2020, November 12, 20 and 30, 2020, December 2, 4, 23 and 28, 2020, and January 15 and 20, 2021.

SCHEDULE B

Source Testing Sources and Contaminants

Source Description and Source ID	Test Contaminants
<p style="text-align: center;">Corn Storage Bins and Baghouse Hammermill Baghouse No. 1</p>	<p style="text-align: center;">Odour Suspended Particulate Matter</p>
<p style="text-align: center;">Fermentation (CO2) Scrubber (EP11)</p>	<p>2,3-Butylene Glycol (CAS No. 513-85-9) Acetaldehyde (CAS No.75-07-0) Acetone (CAS No. 67-64-1) Acrolein (CAS No. 107-02-8) Butyric Acid (CAS No. 107-92-6) Carbon Dioxide (CAS No. 124-38-9) Carbon Monoxide (CAS No. 630-08-0) Ethanol (CAS No. 64-17-5) Formaldehyde (CAS No. 50-00-0) Formic Acid (CAS No. 64-18-6) Furfural (CAS No. 98-01-1) Glycerol (CAS No. 56-81-5) Lactic Acid (CAS No. 50-21-5) Methanol (CAS No. 67-56-1) Methylcyclohexane (CAS No. 108-87-2) Nitrogen Oxides (CAS No. 10102-44-0) Odour Sulphur Dioxide (CAS No. 7446-09-5) Suspended Particulate Matter Toluene (CAS No. 108-88-3)</p>
<p style="text-align: center;">DDGS Storage Building (Source FS02) Process Building (Source FS04) DDGS Storage (FS06)</p>	<p style="text-align: center;">Odour</p>
<p style="text-align: center;">Any new odour and/or suspended particulate matter emission source (not listed in this schedule) that is identified after commencement of Facility operation, having a potential impact at the Sensitive Receptors, and Source Testing can be conducted on the emission source</p>	<p style="text-align: center;">Odour and/or Suspended Particulate Matter</p>

SCHEDULE C

Procedure for Calculating Odour Point of Impingement Concentration

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 with another atmospheric dispersion model acceptable to the Director that employs at least five (5) years of hourly local meteorological data and that can provide results reported as individual one-hour average odour concentrations;
2. Convert and record each of the one-hour average concentrations predicted over the five (5) years of hourly local meteorological data at the Point of Impingement and at the most impacted Sensitive Receptor to 10-minute average concentrations using the One-Hour Average to 10-Minute Average Conversion described below; and
3. Record and present the 10-Minute Average concentrations predicted to occur over a five (5) year period at the Point of Impingement and at the most impacted Sensitive Receptor in a histogram. The histogram shall identify all predicted 10-minute average odour concentration occurrences in terms of frequency, identifying the number of occurrences over the entire range of predicted odour concentration in increments of not more than 1/10 of one odour unit. The maximum 10-minute average concentration of odour at the Sensitive Receptor will be considered to be the maximum odour concentration 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 predicted by the AERMOD atmospheric dispersion model to 10-minute average concentrations:

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

where,

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

$$X_{60\text{min}} = \text{one-hour average concentration}$$

SCHEDULE D

Temperature Monitoring and Recording System Requirements

1. Parameter:

Temperature

2. Location:

The sample point for the continuous temperature monitoring and recording system shall be located at a location where the measurements are representative of the minimum temperature of the gases leaving the combustion chamber of the Thermal Oxidizer.

3. Performance:

The continuous temperature monitoring and recording system shall meet the following minimum performance specifications for the following parameters.

Parameters	Specification
Type	shielded "K" type thermocouple, or equivalent
Accuracy	±1.5 percent of the minimum gas temperature

4. Data Recorder:

The data recorder must be capable of registering continuously the measurement of the monitoring system without a significant loss of accuracy and with a time resolution of 1 minute or better.

5. Reliability:

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

SCHEDULE E

Noise Control Measures

Physical

The Company shall implement the following Noise Control Measure not later than one (1) year after the date of this Approval.

Building Fan Exhausts (Sources EP17, EP18, EP38 to EP42, EP53 to EP55, and EP60) - Acoustically Lined Elbows or New Quieter Fans

Each existing Building Fan Exhaust, Sources EP17, EP18, EP38 to EP42, EP53 to EP55, and EP60, requires installation of the acoustically lined 90-degree elbows directing noise downward. Each acoustically lined elbow shall provide at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	-	1	4	7	7	7	7	7

Or, if the fans are to be replaced with new quieter units/fans:

- Each new EP17 and EP18 fan shall have maximum sound power level not greater than 81 dBA, including any applicable adjustments;
- Each new EP38 to EP42 fans shall have maximum sound power level not greater than 77 dBA, including all applicable adjustments; and
- Each new EP53 to EP55 and EP60 fan shall have maximum sound power level not greater than 90 dBA, including any applicable adjustments.

The Company shall implement the following Noise Control Measures not later than three (3) years after the date of this Approval.

Dust Collector Exhaust Stack (Source EP50A) - Silencer (additional silencer or one new replacement silencer)

The existing Dust Collector Exhaust Stack (Source EP50A), having an existing silencer shall be equipped with an additional silencer. The silencer shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	4	8	14	17	19	15	13	10

If the addition of the second silencer causes any issues, the existing silencer shall be removed and replaced with a new silencer having the minimum acoustical performance specifications in terms of the overall sound insertion loss (IL) of 15 dB. This new replacement silencer shall ensure that the dust collector exhaust stack has a maximum sound power level not greater than 92 dBA, including any applicable adjustments.

Dust Collector Fan (Source EP50B) - acoustical enclosure

The existing Dust Collector Fan (Source EP50B) requires an acoustical enclosure in order to ensure at least 13 dB of noise reduction. The acoustic enclosure shall be made of the material having at least the following

minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	-	3	6	18	31	40	43	40

The Company shall implement the following Noise Control Measures not later than four (4) years after the date of this Approval.

Cooling Towers (Sources EP44 to EP48) - Replacement Low Noise Fans or New Quieter Cooling Towers
Each of the five (5) cooling towers' propeller fan shall be replaced with a low noise fan, capable of reducing the cooling tower sound pressure level by at least 4 dB.

If the fans can not be replaced, then new quieter cooling towers should replace the existing cooling towers. Each new EP44, EP45, EP46, EP47 and EP48 cooling tower shall have the maximum sound power level not greater than 95 dBA, 94 dBA, 94 dBA, 92 dBA and 95 dBA, respectively, including any applicable adjustments.

The Company shall implement the following Noise Control Measures not later than five (5) years after the date of this Approval.

Hammermill Barrier (B-1)

The existing floating barrier around the hammermill and along its structure west side and at the south-west corner of the south side shall extend to the ground and up along structure, sufficiently enough to ensure that this barrier portion has a total length of approximately 13 metres and a minimum height of 7.2 metres above grade level. The barrier shall be located as depicted in Figure 2F of the Acoustic Assessment Report, and be continuous without holes, gaps and other penetrations, and having surface mass of at least 20 kilograms per square metre.

Hammermill (EP03) - Acoustic Enclosure)

The existing Hammermill (EP03) requires an acoustical enclosure in order to ensure at least 11 dB overall noise reduction. The acoustic enclosure shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	-	3	6	18	31	40	43	40

Fire Pump Exhaust Stack (Source EP43) - Muffler (additional muffler or the one new muffler)

The existing Fire Pump Exhaust Stack (Source EP43), having an existing muffler shall be equipped with an additional muffler. The new additional muffler shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	5	10	10	20	20	20	20	15

If the addition of the second muffler causes any issues, the existing muffler shall be removed and replaced with a new muffler having the minimum acoustical performance specifications in terms of the overall sound

insertion loss (IL) of at least 17 dB. This new replacement muffler shall ensure that the fire pump exhaust stack has a maximum sound power level not greater than 107 dBA, including any applicable adjustments.

Administrative:

The Company shall implement the following Noise Control Measures upon issuance of this Approval

- Fire pump maintenance testing shall occur for a maximum of 30 minutes only during daytime hours 07:00 to 19:00, and
- Maximum eight (8) ethanol tanker truck arrivals and eight(8) ethanol tanker truck departures per sixty minute time period during the day time hours 07:00 to 19:00, and
- Maximum four (4) ethanol tanker truck arrivals and four(4) ethanol tanker truck departures per sixty minute time period during the evening hours 07:00 to 23:00, and night time hours 23:00 to 05:00, and
- Maximum two (2) ethanol tanker truck arrivals and two(2) ethanol tanker truck departures per sixty minute time period during the night time hours 05:00 to 07:00, and
- Maximum eight (8) dump truck arrivals and eight(8) dump truck departures per sixty minute time period during the daytime hours 07:00 to 19:00, and
- Corn conveyor shall only operate during daytime hours 07:00 to 19:00.

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

1. GENERAL

Condition No. 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.

2. LIMITED OPERATIONAL FLEXIBILITY, REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION AND PERFORMANCE LIMITS

Conditions No. 2, 3 and 4 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.

3. DOCUMENTATION REQUIREMENTS

Condition No. 5 is included to require the Company to maintain ongoing documentation that demonstrates compliance with the performance limits as specified in Condition 4 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.

4. REPORTING REQUIREMENTS

Condition No. 6 is included to require the Company to provide a yearly Written Summary Form to the Ministry, to assist the Ministry with the review of the site's compliance with the EPA, the regulations and this Approval.

5. OPERATION AND MAINTENANCE

Condition No. 7 is included to require the Company to properly operate and maintain the Processes with Significant Environmental Aspects to minimize the impact to the environment from these processes.

6. COMPLAINTS RECORDING AND REPORTING PROCEDURE

Condition No. 8 is included to require the Company to respond to any environmental complaints regarding the operation of the Equipment, according to a procedure that includes methods for preventing recurrence of similar incidents and a requirement to prepare and retain a written report.

7. RECORD KEEPING REQUIREMENTS

Condition No. 9 is included to require the Company to retain all documentation related to this Approval and provide access to employees in or agents of the Ministry, upon request, so that the Ministry can determine if a more detailed review of compliance with the performance limits as specified in Condition 4 of this Approval is necessary.

8. MONITORING

Condition No. 10 is included to require the Company to gather accurate information so that compliance with the EPA, the regulations and this Approval can be verified.

9. ACOUSTIC AUDIT

Condition No. 11 is included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with this Approval can be verified.

10. REVOCATION OF PREVIOUS APPROVALS

Condition No. 12 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.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 2167-A6LU6K issued on April 12, 2016.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review 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 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:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
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 Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.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 22nd day of September, 2021



Neryed Ragbar, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

ES/

c: District Manager, MECP Peterborough
Sadie Bachynski, Cambium Inc.