

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3973-CV6PBM

Issue Date: December 13, 2023

IGPC Ethanol Inc. 89 Progress Drive Post Office Box, No. 205 Aylmer, Ontario N5H 2R9

Site Location:89 Progress Drive

Aylmer Town, County of Elgin

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

An ethanol production facility, consisting of the following processes and support units:

- · grain receiving/storage;
- · milling;
- cooking;
- · fermentation;
- distillation/dehydration;
- liquid/solid separation;
- oil and fiber separation;
- methanators including the biomethanator flare;
- drying;
- two (2) thermal oxidizers controlling emissions from processing tanks and dryer systems, equipped with temperature monitoring and recording devices;
- ethanol storage/loadout including the truck loadout flare;
- product storage/loadout;
- two (2) natural gas fired internal combustion engine co-generation and heat recovery systems, each generating 3.333 megawatts of electrical power, each equipped with a selective catalytic reduction (SCR) systems;
- · two (2) steam turbine generators; and
- carbon dioxide recovery;

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to **400 million litres of anhydrous ethanol per year and 465,857 tonnes of dry distiller grain 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 Annik White and Kyle Hellewell / RWDI AIR Inc. and dated March 1, 2019 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, as updated in accordance with Condition 5 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. "Best Management Practices Plan" means the document titled "IGPC Aylmer Ethanol Facility, Environmental: Best Management Practice Plan", Revision Level

- 8, revised on January 18, 2023, as amended, which describes the measures to minimize odour emissions and fugitive particulate emissions from the Facility and/or Equipment;
- 8. "Co-Generation and Heat Recovery System" means the natural gas fired internal combustion engine co-generation and heat recovery system equipped with a selective catalytic reduction (SCR) system described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- 9. "Company" means IGPC 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;
- 10. "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;
- 11. "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;
- 12. "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;
- 13. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- 14. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
- 15. "Environmental Assessment Act" means the Environmental Assessment Act, R.S.O. 1990, c.E.18;
- 16. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 17. "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;
- 18. "Equipment with Specific Operational Limits" means the Co-Generation and Heat Recovery System, the Thermal Oxidizer, 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;
- 19. "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;
- 20. "Facility" means the entire operation located on the property where the Equipment is located;
- 21. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
- 22. "Highest Ranking Person" means the highest ranking person regularly present at the Facility who has management responsibilities relating to the Facility;
- 23. "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;
- 24. "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;
- 25. "Ministry" means the ministry of the Minister;
- 26. "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;
- 27. "Noise Control Measures" means measures to reduce the combined noise emission from the Facility and the Related Facility, and/or their Equipment including, but not limited to silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers. It also means the noise control measures outlined in the Acoustic Assessment Report;
- 28. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution Local Air Quality, made under the EPA;
- 29. "Odour Management Plan" means the document titled "IGPC Aylmer Ethanol Facility, Environmental: Odour Management Plan", Revision Level 5, revised on January 18, 2023, as amended, which describes the measures to minimize odour emissions from the Facility and/or Equipment;
- 30. "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 RWDI AIR Inc. and dated December 16, 2022 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
- 31. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
- 32. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
- 33. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
- 34. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
- 35. "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;
- 36. "Property" means, in accordance with s.4 O.Reg 419/05, the single property jointly occupied by IGPC Ethanol Inc. and Air Liquide 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;
- 37. "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;
- 38. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
- 39. "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;
- 40. "Related Facility" means the Air Liquide Canada Inc. Facility;
- 41. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
 - Schedule A Supporting Documentation;
 - Schedule B Co-Generation and Heat Recovery System Maximum Emission Limits;
 - Schedule C Continuous Temperature Monitoring and Recording System Requirements;

- Schedule D Source Testing Targeted Sources and Test Contaminants;
- Schedule E Source Testing Procedures; and
- Schedule F Procedure to calculate and record the 10-minute average concentration of odour at the Point of Impingement and at the most impacted Sensitive Receptor;
- 42. "Sensitive Receptor" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from odour discharges from the Facility, 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);
- 43. "Source Testing" means sampling and testing to measure emissions resulting from operating the Targeted Sources under conditions which yield the worst case emissions within the approved operating range of the Targeted Sources which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
- 44. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
- 45. "Targeted Sources" means the sources listed in Schedule D and Schedule E;
- 46. "Test Contaminants" means the contaminants listed in Schedule D and Schedule E;
- 47. "Thermal Oxidizer THERMOX" means the thermal oxidizer controlling emissions from Dryer A and Dryer B, 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;
- 48. "Thermal Oxidizer RTO2" means the thermal oxidizer controlling emissions from Dryer C, 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;
- 49. "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; and

50. "Written Summary Form" means the electronic questionnaire form, available on the Ministry website, that documents whether Modifications were undertaken at the Facility and compliance with the Approval, 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 Co-Generation and Heat Recovery System Maximum Emission Limits;
 - Schedule C Continuous Temperature Monitoring and Recording System Requirements;
 - Schedule D Source Testing Targeted Sources and Test Contaminants;
 - Schedule E Source Testing Procedures; and
 - Schedule F Procedure to calculate and record the 10-minute average concentration of odour at the Point of Impingement and at the most impacted Sensitive Receptor.

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 October 20, 2027, 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:

- a. ensure that the Noise Control Measures are fully implemented at the Facility as per the schedule outlined in Appendix F of the Acoustic Assessment Report;
- b. ensure, subsequent to the full implementation of the Noise Control Measures, that the noise emissions from the Facility comply with the limits set in Ministry Publication NPC-300; and
- c. ensure, at all times, that the Noise Control Measures are properly maintained and continue to provide the acoustical performance outlined in the Acoustic Assessment Report.
- 4. The Company shall operate any Equipment with Specific Operational Limits approved by this Approval in accordance with the Original ESDM Report.
- 5. The Company shall ensure that the Co-Generation and Heat Recovery System is designed and operated to comply, at all times, with the following Performance Limits:
 - a. The concentrations of nitrogen oxides, particulate matter, carbon monoxide and total hydrocarbons excluding methane in the gases emitted from the stack of the Co-Generation and Heat Recovery System shall not be greater than the emission limits specified in Schedule B of this Approval.

5. THERMAL OXIDIZER OPERATION

- 1. The Company shall ensure that Thermal Oxidizer THERMOX is designed and operated to comply, at all times, with the following requirements:
 - a. The combustion chamber of the Thermal Oxidizer THERMOX shall be preheated to a minimum of 732 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 Thermal Oxidizer THERMOX, is maintained at a minimum of 732 degrees Celsius, as measured by the continuous monitoring and recording system, at all times, when Thermal Oxidizer THERMOX is in operation;
 - c. The residence time of the combustion gases in the combustion chamber of Thermal Oxidizer - THERMOX shall not be less than 0.9 seconds at a temperature of 732 degrees Celsius minimum.
 - d. The concentration of Organic Matter in the undiluted gas emitted from Thermal Oxidizer THERMOX, being an average of ten measurements taken at approximately one minute intervals, shall not be greater than

100 parts per million by volume.

- 2. The Company shall ensure that Thermal Oxidizer RTO2 is designed and operated to comply, at all times, with the following requirements:
 - a. The combustion chamber of Thermal Oxidizer RTO2 shall be preheated to a minimum of 816 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 Thermal Oxidizer RTO2, is maintained at a minimum of 816 degrees Celsius, as measured by the continuous monitoring and recording system, at all times, when Thermal Oxidizer RTO2 is in operation;
 - c. The residence time of the combustion gases in the combustion chamber of Thermal Oxidizer - RTO2 shall not be less than 0.9 seconds at a temperature of 816 degrees Celsius minimum.
 - d. The concentration of Organic Matter in the undiluted gas emitted from Thermal Oxidizer RTO2, being an average of ten measurements taken at approximately one minute intervals, shall not be greater than 100 parts per million by volume.
- 3. The Company shall continuously monitor and record the operating temperature in the combustion chamber of Thermal Oxidizer THERMOX and Thermal Oxidizer RTO2 when they are in operation. The continuous temperature monitoring and recording system shall comply with the requirements outlined in the attached Schedule C.

6. 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. 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.
- 4. 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.

5. Conditions 5.1 and 5.2 do not apply if Condition 2.1 has expired.

7. WRITTEN SUMMARY FORM

- 1. Subject to Condition 6.2, the Company shall prepare, and make available to the Ministry upon request, no later than June 30 of each year, a Written Summary Form signed by the Highest Ranking Person.
- 2. Condition 6.1 does not apply if:
 - a. Condition 2.1 has expired; and
 - b. the Written Summary Form has been completed for the year in which Condition 2.1 expired.

8. 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; and
 - f. procedures for record keeping activities relating to the operation and maintenance programs.
- 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.

9. 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.

10. 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 prepared 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.

11. MITIGATION MEASURES

1. The Company shall take measures to minimize particulate and odorous emissions from all potential sources at the Facility.

12. ODOUR MANAGEMENT PLAN AND BEST MANAGEMENT PRACTICES PLAN

- 1. The Company shall:
 - a. update in consultation with the District Manager and acceptable to the

- Director, the Odour Management Plan and the Best Management Practices Plan within three months of the date of this Approval;
- b. review and evaluate on a yearly basis, the Odour Management Plan and the Best Management Practices Plan for the control of odour emissions and fugitive particulate emissions;
- c. record the results of each yearly review and evaluation and update the Odour Management Plan and the Best Management Practices Plan;
- d. maintain the updated Odour Management Plan and Best Management Practices Plan at the Facility and make it available to the Ministry staff upon request; and
- e. implement, at all times, the most recent version of the Odour Management Plan and the Best Management Practices Plan.
- 2. The Company shall record, and retain such records, each time a specific preventative and control measure described in the Odour Management Plan and the Best Management Practices Plan is implemented. The Company shall record, as a minimum:
 - a. the date when each emission control measure is implemented, including a description of the control measure;
 - b. 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
 - c. the date, time of commencement, and time of completion of each periodic activity conducted to minimize emissions, including a description of the preventative measure/procedure and the name of the individual performing the periodic activity.

13. SOURCE TESTING

- 1. The Company shall:
 - a. perform Source Testing in accordance with the procedures in Schedule E to determine the rates of emissions of the Test Contaminants from the Targeted Sources listed in Schedule D.
 - b. repeat the Source Testing for Odour, required by Condition No. 13.1.a. of this Approval, annually from the date of the first Source Testing, in accordance with the procedures noted in this Approval, for an additional three (3) years.

14. 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.

15. ENVIRONMENTAL COMPLIANCE APPROVAL APPLICATION

1. One (1) year from the date of this Approval the Company shall submit an application for review of the Approval.

SCHEDULE A

Supporting Documentation

- a. Application for Environmental Compliance Approval (Air & Noise), dated
 December 16, 2022, signed by Paul Morin, Technical Services Manager, and submitted by the Company;
- b. Emission Summary and Dispersion Modelling Report prepared by RWDI AIR Inc., dated December 16, 2022 and signed by Annik White;
- c. Acoustic Assessment Report prepared by Annik White and Kyle Hellewell / RWDI AIR Inc. and dated March 1, 2019;
- d. Best Management Practices Plan, provided by IGPC Ethanol, dated January 18, 2023; and
- e. Odour Management Plan, provided by IGPC Ethanol, dated January 18, 2023.

SCHEDULE B - Co-Generation and Heat Recovery System - Maximum Emission Limits

| CONTAMINANT | MAXIMUM EMISSION LIMIT (1) |
|---------------------------------------|----------------------------|
| Nitrogen Oxides | 0.4 kg/MWh |
| Total Suspended Particulate Matter | 0.02 kg/MWh |
| Total Hydrocarbons excluding Methane | 0.19 kg/MWh |
| Carbon Monoxide | 3.5 kg/MWh |

(1) "kg/MWh" means kilogram per megawatt hour

SCHEDULE C - Continuous Temperature Monitoring and Recording System Requirements

PARAMETER:

Temperature

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 Thermal Oxidizer - THERMOX and Thermal Oxidizer - RTO2.

PERFORMANCE:

The Continuous Temperature Monitoring and Recording system shall meet the following minimum performance specifications for the following parameters:

| PARAMETERS | SPECIFICATION | |
|------------|---|--|
| Туре | shielded "K" type thermocouple, or equivalent | |
| Accuracy | ± 1.5 percent of the minimum gas temperature | |

DATA RECORDER:

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

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 D - Source Testing - Targeted Sources and Test Contaminants

| Targeted Sources | Test Contaminants |
|--|--|
| Thermal Oxidizer - THERMOX serving Dryers A and B, Fermentation CO2 Scrubber and Purge Scrubber | Odour |
| Any new odour and/or suspended particulate matter emission source (not listed in the Original ESDM Report) that is identified after the date of this Approval, having a potential impact at the Sensitive Receptors, and Source Testing can be conducted on the emission source. | Odour and/or Suspended Particulate Matter |

Notes for Schedule D:

* Source Testing shall be conducted under normal equipment operating conditions to determine the maximum total odour emission from the Facility.

SCHEDULE E - Source Testing Procedures

- 1. The Company shall submit, not later than three (3) months after the date of this Approval OR 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. The Company shall finalize the Pre-Test Plan in consultation with the Manager.
- 2. The Company shall not commence the Source Testing required under this Approval until the Manager has approved the Pre-Test Plan.
- 3. The Company shall complete the Source Testing not later than three (3) months after the Manager has approved the Pre-Test Plan OR three (3) months after commencement of operation of the Targeted Sources, whichever occurs later, OR within a period as directed or agreed to in writing by the Manager and the District Manager.
- 4. The Company shall notify the Manager, the District Manager and the Director in writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to the Source Testing.
- 5. The Company shall submit a report (hardcopy and electronic format) on the Source Testing to the Manager, the District Manager and the Director not later than three (3) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
 - a. an executive summary;
 - b. an identification of the applicable North American Industry Classification System code (NAICS) for the Facility;
 - c. records of operating conditions at the time of Source Testing, including but not limited to the following:
 - i. production data;
 - ii. Facility/process information related to the operation of the Targeted Sources;
 - iii. description of the emission sources controlled by the Targeted Sources at the time of testing; and
 - iv. operational description of the general building ventilation at the time of testing;
 - d. results of Source Testing, including the emission rate, emission concentration, and relevant emission factor of the Test Contaminants from

- the Targeted Sources; and
- e. a tabular comparison of Source Testing results for the Targeted Sources and Test Contaminants to original emission estimates described in the Company's application and the ESDM Report.
- 6. The Director may not accept the results of the Source Testing if:
 - a. the Source Testing Code or the requirements of the Manager were not followed:
 - b. the Company did not notify the Manager, the District Manager and Director of the Source Testing; or
 - c. the Company failed to provide a complete report on the Source Testing.
- 7. 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.
- 8. 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.
- 9. The Company shall assess odour impacts in accordance with the methodology described in Schedule "F".

SCHEDULE F - 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 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.
 - a. 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:

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

where $X_{10min} = 10$ -minute average concentration $X_{60min} =$ one-hour average concentration

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. THERMAL OXIDIZER OPERATION

Condition No. 5 is included to require the Company to properly operate the Thermal Oxidizers to minimize the impact to the environment from the Thermal Oxidizers and to ensure compliance with O. Reg. 419/05.

4. DOCUMENTATION REQUIREMENTS

Condition No. 6 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 ongoing 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.

5. REPORTING REQUIREMENTS

Condition No. 7 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.

6. OPERATION AND MAINTENANCE

Condition No. 8 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.

7. COMPLAINTS RECORDING AND REPORTING PROCEDURE

Condition No. 9 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.

8. RECORD KEEPING REQUIREMENTS

Condition No. 10 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.

9. MITIGATION MEASURES

Condition No. 11 is included to outline the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.

10. ODOUR MANAGEMENT PLAN AND BEST MANAGEMENT PRACTICES PLAN

Condition No. 12 is included to emphasize that the Facility must be maintained and operated according to a procedure that will result in compliance with the EPA, the regulations and this Approval.

11. SOURCE TESTING

Condition No. 13 is included to require the Company to gather accurate information so that compliance with the EPA, the regulations and this Approval can be verified.

12. REVOCATION OF PREVIOUS APPROVALS

Condition No. 14 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.

13. ENVIRONMENTAL COMPLIANCE APPROVAL APPLICATION

Condition No. 15 is included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, the regulations and this Approval can be verified.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 6333-APFMG4 issued on October 20, 2017

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;

and

- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

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

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

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

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

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 13th day of December, 2023

Nancy E Orpana, P.Eng.

1 Janey Organia

Director

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

MS/

c: District Manager, MECP London - District Annik White, RWDI AIR Inc.