

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

### AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 9625-DH9LPX Issue Date: October 20, 2025

Greenfield Global Inc. 275 Bloomfield Road Chatham, Ontario N7M 5J5

Site Location: 275 Bloomfield Road, Chatham-Kent Municipality, Ontario.

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

### **Description Section**

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

- grain receiving, handling and milling;
- mash cooking;
- fermentation;
- distillation and dehydration;
- liquids and solids separation;
- evaporation;
- corn oil extraction;
- distillers grain recovery, complete with:
  - one (1) direct fired dryer (Dryer D), having a maximum heat input of 46.2 gigajoules per hour, to be replaced with one (1) new superheated steam dryer (New Dryer) equipped with a thermal oxidizer, having a maximum heat input of 59 gigajoules per hour within three (3) years of the date of this Approval; and
  - one (1) superheated steam dryer (Dryer A) equipped with a thermal oxidizer, having a maximum heat input of 59 gigajoules per hour;
- product storage and transportation;
- cooling towers;
- Co-generation Facility 1:

- one (1) natural gas fired combustion turbine producing 4.65 megawatts of electrical power at 51.59 gigajoules per hour maximum thermal input, equipped with natural gas fired auxiliary burners having 92.2 gigajoules per hour maximum thermal input, and equipped with one (1) heat recovery steam generator providing 35,000 kilograms per hour of steam;
- Co-generation Facility 2:
  - one (1) natural gas fired combustion turbine producing 5.25 megawatts of electrical power at 54.8 gigajoules per hour maximum thermal input, equipped with natural gas fired auxiliary burners having 54.7 gigajoules per hour maximum thermal input, and equipped with one (1) heat recovery steam generator providing 38,000 kilograms per hour of steam;
- one (1) process boiler fired by natural gas or No. 2 fuel oil, rated at 123 gigajoules per hour maximum thermal input;
- one (1) process boiler fired by natural gas or No. 2 fuel oil, rated at 124 gigajoules per hour maximum thermal input;
- waste water treatment complete with an open flare;

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to 227 million litres per year of anhydrous ethanol and 117,000 tonnes per year of dry distillers grain, and 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 Slavi Grozev / RWDI AIR Inc. and dated March 25, 2024 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 a document or set of documents which describe measures to minimize fugitive particulate matter and odour emissions from the Facility and/or Equipment;
- 8. "Co-generation Facility 1" means the natural gas fired combustion turbine, heat recovery steam generator, and natural gas fired auxiliary burner as described in the Original ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
- 9. "Co-generation Facility 2" means the natural gas fired combustion turbine, heat recovery steam generator, and natural gas fired auxiliary burner, as described in the Original ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
- 10. "Company" means Greenfield Global 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;
- 11. "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;
- 12. "Date of Commissioning" means the first day on which each distillers grain dryer, namely Dryer A and New Dryer and respective integral thermal oxidizer is commissioned by the Company;
- 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. "Dryer A" means the superheated steam dryer for distillers grain drying, equipped with an integral thermal oxidizer, as described in the ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
- 17. "Dryer D" means the direct fired dryer for distillers grain drying, as described in the ESDM Report,

- this Approval and in the Schedules referred to herein and any other equipment or processes;
- 18. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
- 19. "Environmental Assessment Act" means the Environmental Assessment Act, R.S.O. 1990, c.E.18;
- 20. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
- 21. "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;
- 22. "Equipment with Specific Operational Limits" means Co-generation Facility 1, Co-generation Facility 2, the process boilers, the integral thermal oxidizers serving the distillers grain dryers Dryer A and New Dryer, 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.
- 23. "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
- 24. "Facility" means the entire operation located on the property where the Equipment is located;
- 25. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
- 26. "Flare" means the open flare serving the waste water treatment operation, described in the ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
- 27. "Fuel Flow Rate" means flow rate of the fuel, expressed in cubic metres per second at standard temperature and pressure, or kilograms per second;
- 28. "Heat Output" means the total useful heat energy recovered from the combustion turbine as heat, expressed in megawatts;
- 29. "Highest Ranking Person" means the highest ranking person regularly present at the Facility who has management responsibilities relating to the Facility;
- 30. "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;
- 31. "Lower Heating Value" means the energy released during combustion of the fuel, excluding the latent heat content of the water vapour component of the products of combustion, expressed in megajoules per cubic metre at standard temperature and pressure, or megajoules per kilogram;
- 32. "Minister" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the EPA under the Executive Council Act;
- 33. "Ministry" means the ministry of the Minister;
- 34. "Modification" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the Facility that may discharge or alter the rate or manner of discharge of a Compound of Concern to the air or discharge or alter noise or vibration emissions from the Facility;
- 35. "New Dryer" means the superheated steam dryer for distillers grain drying, equipped with an integral thermal oxidizer, to replace Dryer D, as described in the ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
- 36. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers;
- 37. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution Local Air Quality, made under the EPA;
- 38. "Odour Management Plan" means the document which describes the measures to minimize odour emissions from the Facility and/or Equipment;
- 39. "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 November 15, 2024, submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
- 40. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
- 41. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
- 42. "Power Output" means the electricity and shaft power production of the combustion turbine, expressed in megawatts;
- 43. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an

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

- 44. "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;
- 45. "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;
- 46. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
- 47. "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;
- 48. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
  - Schedule A Supporting Documentation
  - Schedule B Targeted Sources & Test Contaminants
  - Schedule C Source Testing Procedures
  - Schedule D Procedure for Calculating Odour Point of Impingement Concentration
  - Schedule E Co-generation Facility Emission Limits
  - Schedule F Calculation of Thermal Efficiency of Co-generation Facility
  - Schedule G Continuous Temperature Monitor & Data Recorder;
- 49. "Sensitive Receptor" means any location where there are human activities such as residences, nursing homes, day-care facilities, hospitals, schools, parklands, recreational facilities, play grounds, commercial plazas and office buildings;
- 50. "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
- 51. "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 Targeted Sources & Test Contaminants.
  - Schedule C Source Testing Procedures.
  - Schedule D Procedure for Calculating Odour Point of Impingement Concentration.
  - Schedule E Co-generation Facility Emission Limits.
  - Schedule F Calculation of Thermal Efficiency of Co-generation Facility.
  - Schedule G Continuous Temperature Monitor & Data Recorder.

### 2. 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, at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.
- 4. The Company shall, at all times, ensure that the vibration emissions from the Facility comply with the limits set out in Ministry Publication NPC-207.
- 5. The Company shall operate any Equipment with Specific Operational Limits approved by this Approval in accordance with the Original ESDM Report and Conditions No. 11 and No. 12 in this Approval.

### 5. BEST MANAGEMENT PRACTICES PLAN - ODOUR MANAGEMENT PLAN

- 1. The Company shall prepare and continue to update as necessary, within three (3) months of issuance of this Approval, an Odour Management Plan and a Best Management Practices Plan for the control of odour emissions and fugitive particulate matter emissions from any potential sources of odour/fugitive dust emissions resulting from the operation of the Facility.
  - a. The Best Management Practices Plan shall, at minimum, be prepared in accordance with the Ministry's publication "Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources" (as amended);
  - b. The Odour Management Plan shall, at minimum, be prepared in accordance with the Ministry's publication "Best Management Practices for Industrial Sources of Odour" (as amended).
- 2. The Company shall maintain the updated Odour Management Plan and Best Management Practices Plan at the Facility and make it available to the Ministry staff upon request.
- 3. The Company shall implement, at all times, the most recent version of the Odour Management Plan and the Best Management Practices Plan.
- 4. The Company shall review, evaluate and update the Odour Management Plan and the Best Management Practices Plan as necessary or at the direction of the District Manager.
- 5. The Company shall retain written documentation of specific preventative and control measures described in the Odour Management Plan and the Best Management Practices Plan. 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.

### 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 6.1 and 6.2 do not apply if Condition 2.1 has expired.

### 7. WRITTEN SUMMARY FORM

- 1. Subject to Condition 7.2, 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 7.1 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.
- 3. The Company shall ensure that the Flare is operated to comply with the following requirements:
  - a. The Flare shall be operated with a pilot flame present at all times when gas is vented through the Flare;

b. The Flare shall be operated with no visible emissions except periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

### 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 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 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 7.1 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 9 of this Approval.

### 11. CO-GENERATION FACILITIES

- 1. The Company shall ensure that Co-generation Facility 1 and Co-generation Facility 2 are designed and operated to comply with the following performance requirements:
  - a. The concentrations of nitrogen oxides and carbon monoxide in the undiluted gas emitted from the Co-generation Facility 1 stack and the Co-generation Facility 2 stack are not greater than their respective limits as specified in Schedule E attached to this Approval.
  - b. The Thermal Efficiencies of Co-generation Facility 1 and Co-generation Facility 2 are not less than the respective Thermal Efficiencies specified in Schedule E of this Approval.
- 2. The Company shall perform a test once every two (2) calendar years to determine the Thermal Efficiency of Co-generation Facility 1 and the Thermal Efficiency of Co-generation Facility 2. The Company shall, as a minimum:
  - i. determine the parameters described in Schedule F, during the Thermal Efficiency testing for Co-generation Facility 1 and for Co-generation Facility 2;
  - ii. calculate the Thermal Efficiency of Co-generation Facility 1 and of Co-generation Facility 2 according to the formula described in Schedule F; and
  - iii. prepare a summary of the results of the Thermal Efficiency testing no later than two (2) months after completing the test. The summary shall indicate the Thermal Efficiency of Co-generation Facility 1 and of Co-generation Facility 2 and include all parameters described in Schedule F.
  - iv. If the measured Thermal Efficiency is less than the anticipated Thermal Efficiency specified in Schedule E of this Approval (with a tolerance of 0.05 multiplied by the anticipated Thermal Efficiency), the Company shall notify the Ministry so that the emission limits specified in Schedule E of this Approval can be revised accordingly.

### 12. DISTILLERS GRAIN DRYERS / THERMAL OXIDIZERS

1. The Company shall replace the existing Dryer D with the New Dryer, complete with an integral thermal oxidizer, not later than thirty-six (36) months after the date of issuance of this Approval.

- 2. If the existing Dryer D will not be replaced with the New Dryer, complete with an integral thermal oxidizer, within thirty-six (36) months after the date of issuance of this Approval, the Company shall submit an application for an amendment to this Approval to update the status of the replacement of the existing Dryer D, not later than thirty (30) months after the date of issuance of this Approval.
- 3. The Company shall notify the District Manager of the Date of Commissioning of the New Dryer and the associated thermal oxidizer, at least fifteen (15) days prior to the Date of Commissioning of the New Dryer.
- 4. The Company shall ensure that the integral thermal oxidizers associated with Dryer A and the New Dryer are designed and operated to comply, at all times, with the following requirements:
  - a. The combustion chamber of each integral thermal oxidizer shall be preheated to a minimum of 835 degrees Celsius, as measured by the continuous monitoring and recording system, prior to introducing grain feed into the dryer;
  - b. The temperature in the combustion chamber of each integral thermal oxidizer is maintained at a minimum of 835 degrees Celsius, as measured by the continuous monitoring and recording system, at all times, when the integral thermal oxidizer is in operation;
  - c. The residence time of the combustion gases in the combustion chamber of each integral thermal oxidizer shall not be less than 1.0 second at a minimum temperature of 835 degrees Celsius;
  - d. The Company shall continuously monitor and record the operating temperature in the combustion chamber of each integral thermal oxidizer when the integral thermal oxidizer is in operation. The continuous temperature monitoring and recording system shall comply with the requirements outlined in Schedule G of this Approval.

### 13. SOURCE TESTING

1. The Company shall perform Source Testing in accordance with the procedures in Schedule C to determine the rates of emissions of the Test Contaminants from the Targeted Sources listed in Schedule B.

### 14. CHANGE OF OWNERSHIP

- 1. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any of the following changes to Facility operations:
  - a. the ownership of the Facility;

- b. the operator of the Facility;
- c. the address of the Company;
- d. the partners, where the Company is or any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c. B.17, shall be included in the notification; or
- e. the name of the corporation where the Company is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C.39, shall be included in the notification.
- 2. In the event of any change in ownership of the Facility, the Company shall notify the successor of the existence of this Approval and provide the successor with a copy of this Approval, and the Company shall provide a copy of the notification to the District Manager and the Director.

### 15. 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 14, 2024, signed by Cory Cronin and submitted by the Company;
- 2. Emission Summary and Dispersion Modelling Report, prepared by RWDI AIR Inc. and dated November 15, 2024;
- 3. Acoustic Assessment Report, prepared by RWDI AIR Inc. and dated March 25, 2024.

# SCHEDULE B Targeted Sources and Test Contaminants for Source Testing:

Targeted Source	Test Contaminants	Date
Stack S-13A serving the Distillers Grain Dryers (Dryer A, Dryer D and New Dryer, as applicable)	<ul> <li>nitrogen oxides 10102-44-0</li> <li>carbon monoxide 630-08-0</li> <li>sulphur dioxide 7446-09-5</li> <li>acrolein 107-02-8</li> <li>benzene 71-43-2</li> </ul>	within one (1) year after the date of issuance of this Approval; and within three (3) months of the Date of Commissioning of the New Dryer and integral thermal oxidizer
Co-generation Facility 1 and Co-generation Facility 2	• carbon monoxide 630-08-0	By December 31, 2020, and then every two (2) calendar years thereafter

### **SCHEDULE C**

### **Source Testing Procedures**

- 1. The Company shall submit, not later than three (3) months prior to the Source Testing, to the Manager a Pre-Test Plan for the Source Testing required under this Approval. 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 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.
- 4. The Company shall submit a report (electronic format) on the Source Testing to the Manager, the District Manager and the Director not later than three (3) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
  - 1. an executive summary;
  - 2. an identification of the applicable North American Industry Classification System code (NAICS) for the Facility;
  - 3. records of operating conditions at the time of Source Testing, including but not limited to the following:
    - a. production data and equipment operating rate as a percentage of maximum capacity, for all processes and equipment discharging to the Targeted Sources;
    - b. Facility/process information related to the operation of the Targeted Sources;
    - c. description of the emission sources controlled by the Targeted Sources at the time of testing;
    - d. operational description of the general building ventilation at the time of testing;
    - e. any parameters necessary to verify compliance with the limits listed in Schedule E of this Approval, if applicable to the tested sources;
  - 4. results of Source Testing, including the emission rate, emission concentration, and relevant emission factor of the Test Contaminants from the Targeted Sources;
  - a tabular comparison of calculated emission rates and emission factors based on Source Testing results for the Test Contaminants to relevant estimates described in the ESDM Report; and

- 6. a comparison of the Source Testing results to the concentration limits listed in Schedule E of this Approval, if applicable to the tested sources;
- 5. The Director may not accept the results of the Source Testing if:
  - 1. the Source Testing Code or the requirement of the Manager were not followed;
  - 2. the Company did not notify the Manager, the District Manager and Director of the Source Testing; or
  - 3. the Company failed to provide a complete report on the Source Testing.
- 6. If the Director does not accept the result of the Source Testing, the Director may require re-testing. If re-testing is required, the Pre-Test Plan strategies need to be revised and submitted to the Manager for approval. The actions taken to minimize the possibility of the Source Testing results not being accepted by the Director must be noted in the revision.
- 7. The Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 and the Procedure Document with the results from the Source Testing, not later than three (3) months after the submission of the Source Testing report and make these records available for review by staff of the Ministry upon request.

### SCHEDULE D

### Procedures for the Calculation of 10-minute Average Concentration of Odour

### CALCULATE ONE-HOUR AVERAGE CONCENTRATION

The one-hour average concentration of odour at the most impacted Sensitive Receptor shall be calculated using the detailed procedure described as follows:

- 1. Calculate one-hour average concentration of odour at the most impacted Sensitive Receptor at which the highest concentration occurs in employing *AERMOD* or 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 each one-hour average concentrations predicted over the five (5) years of hourly local meteorological data to a 10-minute average concentration 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 corresponding to 99.5% of the time in the 5 year modelling period at the most impacted Sensitive Receptor. If elimination of meteorological anomalies in accordance with the section 6.5 of the ministry's document titled "Air Dispersion Modelling Guideline for Ontario" dated February 2017, as amended, is considered before considering frequency, only those anomalies per year of meteorology over the full modelling grid as required under section 14 of O. Reg. 419/05 shall be removed.
- 4. Use the following formula to convert and record one-hour average concentrations at the Point of Impingement and at the most impacted Sensitive Receptor to 10-minute average concentrations:

$$X_{_{10\text{min}}} = X_{_{60\text{min}}} * 1.65$$
  
where  $X_{_{10\text{min}}} = 10$ -minute average concentration  $X_{_{60\text{min}}} = \text{one-hour}$  average concentration

(Equation: X Subscript 10 min Baseline equals X Subscript 60 min Baseline times 1.65, where X Subscript 10 min Baseline equals 10-minute average concentration and X Subscript 60 min Baseline equals one-hour average concentration.)

# SCHEDULE E CO-GENERATION FACILITY LIMITS

<b>CO-GENERATION FACILITY</b>	PARAMETER	LIMIT
Co-generation Facility 1	Nitrogen Oxides	87.5 ppmv <sup>1,2</sup>
	Carbon Monoxide	60.0 ppmv <sup>1</sup>
	Thermal Efficiency	80.9 percent <sup>3</sup>
Co-generation Facility 2	Nitrogen Oxides	41.4 ppmv <sup>1,2</sup>
	Carbon Monoxide	60.0 ppmv <sup>1</sup>
	Thermal Efficiency	89.4 percent <sup>3</sup>

- 1. "ppmv" means parts per million by volume at Reference Conditions (ambient temperature at 15 degrees Celsius, 60 percent relative humidity and 101.3 kiloPascals barometric pressure) on a dry volume basis normalized to 15 percent oxygen.
- 2. "Nitrogen Oxides" means oxides of nitrogen, including nitric oxide (NO) and nitrogen dioxide (NO2).
- 3. The calculated Thermal Efficiency shall be converted to Reference Conditions.

### **SCHEDULE F**

### Thermal Efficiency Testing Procedures:

### Parameters to be tested/measured:

- 1. Power Output
- 2. Heat Output
- 3. Fuel Flow Rate
- 4. Lower Heating Value
- 5. (a) Ambient air temperature (expressed in degrees of Celsius)
  - (b) Barometric pressure (expressed in kilopascal)
  - (c) Relative humidity (expressed in percent)
- 6. Date, time and duration of test

### **FORMULA:**

Thermal Efficiency = (Power Output + Heat Output) x 100%

Fuel Flow Rate x Lower Heating Value

### **NOTE:**

Thermal Efficiency testing should be conducted at maximum rating or at the maximum load achievable at the time of testing and shall employ an averaging time of not less than three hours.

# SCHEDULE G Continuous Temperature Monitor & Data Recorder

### **LOCATION:**

The continuous temperature monitors shall be installed at accessible locations where the measurements are representative of the actual operating temperatures of the thermal oxidizers and are used to verify compliance of this Approval.

### **PERFORMANCE:**

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

PARAMETERS	SPECIFICATION
Туре	shielded "K" type thermocouple, or equivalent
Accuracy	+/- 5 degrees Celsius

### **DATA RECORDER:**

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

### **RELIABILITY:**

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

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. 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. BEST MANAGEMENT PRACTICES PLAN / ODOUR MANAGEMENT PLAN

Condition No. 5 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.

### 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 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.

### 5. WRITTEN SUMMARY FORM

Condition No. 7 is included to require the Company to prepare, and make available to the Ministry upon request, a yearly Written Summary Form, to assist the Ministry with the review of the site's compliance with the EPA, the regulations and this Approval.

### 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. EQUIPMENT WITH SPECIFIC OPERATIONAL LIMITS

Condition No. 11 and 12 are included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility.

### 10. 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.

### 11. CHANGE OF OWNERSHIP

Condition No. 14 is included to require the Company to notify/report to the Ministry so that compliance with the EPA, the regulations and this Approval can be verified.

### 12. REVOCATION OF PREVIOUS APPROVALS

Condition No. 15 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). 9225-BUKJNN issued on December 15, 2020.

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

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

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

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;

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

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

and

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 and Toronto, Ontario M7A 2J3 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 20th day of October, 2025

Nancy E Orpana, P.Eng.

Director

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

QN/

c: Area Manager, MECP Windsor

c: District Manager, MECP Sarnia Annik White, RWDI Air Inc.