

#### AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

**NUMBER 7706-D298QB** 

Issue Date: September 23, 2024

LANXESS Canada Co./Cie. 25 Erb Street, Elmira Woolwich, Ontario N3B 3J3

**Site Location:**25 Erb Street, Building 33
Woolwich Township, Regional Municipality of Waterloo

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

### **Description Section**

A facility for the production of synthetic oil, antioxidants, rubber additives, crop protection chemicals, and specialty chemicals, consisting of the following processes and support units:

- · reaction vessels;
- washing vessels;
- · stripping vessels;
- · distillation vessels;
- slurry tanks, mixing tanks/blenders, grinder feed tanks, packaging tanks and storage tanks;
- · vacuum pumps;
- · filter presses;
- · laboratories;
- wastewater treatment system, including the use of a granular activated carbon adsorber to provide backup treatment of vapours from the wastewater treatment system when the Thermal Oxidizer is out of operation;
- on-site and off-site groundwater containment and treatment systems;
- and the following Equipment with Specific Operational Limits:
  - three (3) steam boilers, with Source No. 45-12, using natural gas as fuel, each have a maximum heat input of 14.09 million kilojoules per hour, together discharging to the air through a common stack at a volumetric flow rate of 3.4 cubic metres per second, having an exit diameter of 1.22 metres

and extending 18.75 metres above grade;

- one (1) natural gas fired steam boiler, designated as Coil Tube Boiler with Source No. 20-55, having a maximum thermal input of 20.65 million kilojoules per hour, discharging to the air through a stack at a volumetric flow rate of 1.66 cubic metres per second, having an exit diameter of 0.66 metre, extending 13.84 metres above grade;
- one (1) natural gas fired steam boiler, designated as Coil Tube Boiler with Source No. 20-54, having a maximum thermal input of 20.65 million kilojoules per hour, discharging to the air through a stack at a volumetric flow rate of 1.66 cubic metres per second, having an exit diameter of 0.66 metre, extending 14.80 metres above grade;
- one (1) natural gas fired steam boiler, designated as Coil Tube Boiler with Source No. 20-53, having a maximum thermal input of 20.65 million kilojoules per hour, discharging to the air through a stack at a volumetric flow rate of 1.66 cubic metres per second, having an exit diameter of 0.66 metre, extending 14.93 metres above grade;
- one (1) regenerative type thermal oxidizer equipped with ceramic packing and one (1) natural gas fired burner having a maximum heat input of 1.44 million kilojoules per hour, discharging to the air at a volumetric flow rate of 0.63 cubic metre per second through a stack, designated as TH-1(57-10), having an exit diameter of 0.3 metre and extending 9.14 metres above grade, serving the Wastewater Treatment Facility;
- one (1) regenerative thermal oxidizer equipped with two (2) emergency bypass vents, ceramic packing, a continuous temperature monitoring and recording system, and one (1) natural gas fired burner, having a maximum heat input of 3.44 million kilojoules per hour, discharging to the air at a volumetric flow rate of 1.02 cubic metre per second through a stack, designated as Vent 37-123, having an exit diameter of 0.60 metres and extending 16.43 metres above grade, serving a vent condenser and the BLE storage tanks in the BLE Production Process;
- one (1) regenerative thermal oxidizer equipped with a continuous temperature monitor and recorder system, complete with a scrubber, fired by natural gas with a maximum heat input of approximately 1.44 million kilojoules per hour, discharging to the air at a volumetric flow rate of 0.94 cubic metre per second through a stack, designated as 33-10, having an exit diameter of 0.36 metre, extending 17.76 metres above grade, serving the PAO processes;
- one (1) carbon regeneration system afterburner, equipped with a natural gas

fired burner having a maximum heat input of approximately 3.69 million kilojoules per hour, discharging to the air at a volumetric flow rate of 5.07 cubic metre per second through a stack, designated as 44-3, having an exit diameter of 0.61 metre, extending 16.08 metres above grade, serving the Carbon Regeneration System;

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to 90 million kilograms of finished products 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 Michael Masschaele / GHD and dated May 13, 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. "Acoustic Audit" means an investigative procedure consisting of measurements

- and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the Performance Limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233;
- 6. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit , prepared in accordance with Publication NPC-233;
- 7. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility;
- 8. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
- 9. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
- 10. "CAP" means Elmira Community Advisory Panel;
- 11. "Company" means LANXESS Canada Co./Cie. that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
- 12. "Compound of Concern" means a contaminant described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged from the Facility in an amount that is not negligible;
- 13. "Description Section" means the section on page one of this Approval describing the Company's operations and the Equipment located at the Facility and specifying the Facility Production Limit for the Facility;
- 14. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;
- 15. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- 16. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
- 17. "Environmental Assessment Act" means the *Environmental Assessment Act*, R.S.O. 1990, c.E.18;
- 18. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 19. "Equipment" means equipment or processes described in the ESDM Report, this

- Approval and in the Schedules referred to herein and any other equipment or processes;
- 20. "Equipment with Specific Operational Limits" means any Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators including the aforementioned boilers, thermal oxidizers and carbon regeneration system afterburner, or any other Equipment that is specifically referenced in any published Ministry document that outlines specific operational guidance that must be considered by the Director in issuing an Approval;
- 21. "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
- 22. "Facility" means the entire operation located on the property where the Equipment is located;
- 23. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
- 24. "Highest Ranking Person" means the highest ranking person regularly present at the Facility who has management responsibilities relating to the Facility;
- 25. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Acoustic Assessment Report or the design/implementation of Noise Control Measures for the Facility and/or Equipment. The Independent Acoustical Consultant shall not be retained by the Acoustical Consultant involved in the noise impact assessment or the design/implementation of Noise Control Measures for the Facility and/or Equipment;
- 26. "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;
- 27. "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;
- 28. "Ministry" means the ministry of the Minister;
- 29. "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;
- 30. "Noise Abatement Action Plan" means the noise abatement program developed by the Company, submitted to the Director and District Manager and approved by the Director, designed to achieve compliance with the sound level limits set in Publications NPC-300.
- 31. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers;
- 32. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution Local Air Quality, made under the EPA;
- 33. "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 GHD and dated October 6, 2023, submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
- 34. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
- 35. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
- 36. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
- 37. "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;
- 38. "Publication NPC-103" means the Ministry Publication NPC-103 of the Model Municipal Noise Control By-Law, Final Report, August 1978, published by the Ministry as amended;
- 39. "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;
- 40. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;

- 41. "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;
- 42. "Report EPS 1/PG/7" means the report titled "Protocols and Performance Specifications for Continuous Monitoring of Gaseous Emissions from Thermal Power Generation" dated December 2005 and published by Environment Canada, as amended.
- 43. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
  - · Schedule A Supporting Documentation
  - Schedule B Continuous Monitoring and Recording System Requirements
- 44. "Thermal Oxidizers" means the regenerative thermal oxidizers described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval.
- 45. "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
- 46. "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 Continuous Monitoring and Recording System Requirements

#### 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:
  - a. implement before October 2025, the Noise Abatement Action Plan outlined in section 5.2.5 of the Acoustic Assessment Report;
  - b. ensure, subsequent to the implementation of the Noise Control Measures, that the noise emissions from the Facility operations, comply with the limits set out in Ministry Publication NPC-300;
  - c. ensure 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, 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 Condition Nos. 5 and 6 in this Approval.

#### 5. CONTINUOUS MONITORING AND RECORDING

- 1. The Company shall continuously monitor and record the temperature in the combustion chamber of each Thermal Oxidizer and the carbon regeneration system afterburner, when the Thermal Oxidizer and the carbon regeneration system afterburner are in operation. The temperature monitoring and recording system shall comply with the requirements outlined in the attached Schedule "B".
- 2. The Company shall continuously monitor and record the following parameters for the carbon regeneration system afterburner:

- a. the concentration of oxygen in the undiluted flue gas exiting the afterburner for a minimum of twenty-three (23) hours per day;
- b. the continuous monitoring system for oxygen shall be equipped with continuous recording devices and shall comply with the requirements outlined in Schedule "B".

#### 6. THERMAL OXIDIZER AND AFTERBURNER OPERATIONAL LIMITS

- 1. The Company shall operate each Thermal Oxidizer and the carbon regeneration system afterburner in such a manner that:
  - a. the vapours collected on site are not introduced into each Thermal Oxidizer and the carbon regeneration system afterburner until the temperature in the combustion chamber has reached 871 degrees Celsius minimum, as measured by the temperature monitor;
  - b. the temperature in the combustion chamber of each Thermal Oxidizer and the carbon regeneration system afterburner, as measured by the temperature monitor, is maintained at 871 degrees Celsius minimum at all times, when the Thermal Oxidizer is in operation;
  - c. the residence time of the combustion gases in the combustion chamber of each Thermal Oxidizer and the carbon regeneration system afterburner shall not be less than 0.5 second at a temperature of 871 degrees Celsius minimum;
  - d. the concentration of residual oxygen in the undiluted flue gas from the carbon regeneration system afterburner, as recorded by the continuous oxygen monitoring system, shall not be less than four (4) percent by volume on a dry basis.

#### 7. DOCUMENTATION REQUIREMENTS

- 1. The Company shall maintain an up-to-date Log.
- 2. No later than March 31 of each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
- 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.

#### 8. 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.

#### 9. 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.

#### 10. 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.

#### 11. 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.

#### 12. NOTIFICATION TO CAP

- 1. The Company shall notify CAP thirty (30) days prior to or as soon as possible of any Modification, which increases the contaminant emissions and/or discharges new contaminants from the Facility.
- 2. The Company shall notify CAP on any Modification, specified in Condition No. 12.1, by providing CAP the following:

- a. written description of the Modification;
- b. a summary of contaminant emission sources;
- c. a summary of dispersion modelling results, including:
  - i. the contaminants discharged from the Facility;
  - ii. the CAS numbers, estimated emission rates, calculated maximum point of impingement concentrations and Ministry standards for the contaminants;
  - iii. the dispersion calculations and the type of model used for the calculations.

#### 13. PUBLIC ENGAGEMENT

- 1. If CAP, the local community and/or the District Manager request in writing additional information to those stipulated in Condition No. 12, and/or involvement on new environmental issues on the Facility, the Company shall develop in consultation with the District Manager and the local community, a Public Engagement Plan for the Facility. This Public Engagement Plan shall:
  - a. serve as a forum for the dissemination, consultation, review and exchange of information relevant to the operation of the Facility, including environmental monitoring, maintenance and complaint/public concerns resolution;
  - b. describe how the local community was consulted and include a list of the local community groups who were consulted; and
  - c. include a list of all Ministry comments received, if any, on the development of the Public Engagement Plan, and a description of how each Ministry comment was addressed in the Public Engagement Plan.
- 2. The Company shall submit the Public Engagement Plan to the Distgrict Manager according to the timeline indicated by the District Manager.
- 3. Upon acceptance of the Public Engagement Plan by the District Manager, the Company shall immediately implement the Public Engagement Plan.
- 4. The Company shall update the Public Engagement Plan as necessary or at the direction of the District Manager.

#### 14. CHANGE OF OWNERSHIP

- 1. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manger, within thirty (30) days of the occurrence of any 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;
- 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.

#### 16. ACOUSTIC AUDIT

- 1. The Company:
  - a. shall carry out Acoustic Audit measurements of the noise emissions from the Facility in accordance with the procedures in Ministry Publication NPC-103; and
  - b. shall submit an Acoustic Audit Report on the results of the Acoustic Audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Ministry Publication NPC-233, to the District Manager and the Director, not later than eight(8) months after the completion of the Noise Abatement Action Plan.

#### 2. The Director:

- a. may not accept the results of the Acoustic Audit if the requirements of Ministry Publication NPC-233 were not followed; and
- b. may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

#### **SCHEDULE A**

**Supporting Documentation** 

- 1. Environmental Compliance Approval Application, dated September 27, 2023, signed by Jamie Petznick and submitted by the Company;
- 2. Emission Summary and Dispersion Modelling Report, prepared by GHD and dated October 6, 2023;
- 3. Acoustic Assessment Report, prepared by Michael Masschaele / GHD and dated May 13, 2024.

#### **SCHEDULE B**

**Continuous Monitoring and Recording System Requirements** 

**PARAMETER:** Temperature

#### LOCATION:

The sample point for the continuous temperature monitoring and recording system shall be shall be installed in accordance with the requirements of Report EPS 1/PG/7 at a location where the measurements are representative of the minimum temperature of the undiluted gases leaving the the secondary chamber of each Thermal Oxidizer and the carbon regeneration system afterburner.

#### **PERFORMANCE:**

The Continuous Temperature Monitoring 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
Response Time (95%)	60 sec. (max)

Operating Range (Full Scale)	1.5 times approval limit
Standard Tolerance	± 2.2 °C or ± 0.75%
Resolution	0.1 °C
Calibration	Per manufacturer's recommendations

#### **RECORDER:**

The recorder must be capable of registering continuously the measurement of the monitoring system without a significant loss of accuracy and with a time resolution of 5 minutes or better.

#### **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 90 percent of the time for each calendar quarter during the first full year of operation, and 95 percent, thereafter.

PARAMETER: Oxygen

#### **INSTALLATION:**

The continuous oxygen monitor shall be installed in accordance with the requirements of Report EPS 1/PG/7 at an accessible location where the measurements are representative of the actual concentration of oxygen in the undiluted gases leaving the the carbon regeneration system afterburner and shall meet the following installation specifications.

PARAMETERS	SPECIFICATION
Range (percentage)	0 to 20 or 0 to 25
Calibration Gas Ports	close to the sample point

#### PERFORMANCE:

The Continuous Oxygen Monitor shall meet the following minimum performance specifications for the following parameters.

PARAMETERS	SPECIFICATION
Span Value (percentage)	40% to 75% of Full Scale
Relative Accuracy	≤ the greater of 10 percent of the mean
	value of the reference method test data or
	0.5% average absolute difference
Calibration Error	0.25 percent O2
System Bias	≤ the greater of 5 percent of the FS value
	or 0.5% average absolute difference
Procedure for Zero and Span Calibration	All system components checked
Check	
Zero Calibration Drift (24-hour)	≤ 0.5 percent O2
Span Calibration Drift (24-hour)	≤ 0.5 percent O2
Response Time (90 percent response to a	≤ 200 seconds
step change)	
Operational Test Period	≥ 168 hours without corrective
	maintenance

#### **CALIBRATION:**

Daily calibration drift checks on the monitor shall be performed and recorded in accordance with the requirements of Report EPS 1/PG/7.

#### **DATA RECORDER:**

The data recorder must be capable of registering continuously the measurement of the monitor with an accuracy of 0.5 percent of a full scale reading or better and with a time resolution of 2 minutes or better.

#### **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 90 percent of the time for each calendar quarter during the first full year of operation, and 95 percent, thereafter.

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

#### 1. GENERAL

Condition number 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 number 2, 3 and 4 are included to 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. CONTINUOUS MONITORING AND RECORDING

Condition number 5 is included to require the *Company* to gather accurate information on a continuous basis so that the environmental impact and subsequent compliance with the Act, the regulations and this *Approval* can be verified.

#### 4. THERMAL OXIDIZER AND AFTERBURNER OPERATIONAL LIMITS

Condition number 6 is included to: (a) prevent an adverse effect resulting from the operation of the Thermal Oxidizers and the Carbon Regeneration System Afterburner; (b) ensure that the Thermal Oxidizers and the Carbon Regeneration System Afterburner are actually operated at the required temperature and minimum oxygen level.

#### 5. DOCUMENTATION REQUIREMENTS

Condition number 7 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.

#### 6. WRITTEN SUMMARY FORM

Condition number 8 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.

#### 7. OPERATION AND MAINTENANCE

Condition number 9 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.

#### 8. COMPLAINTS RECORDING AND REPORTING PROCEDURE

Condition number 10 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.

#### 9. RECORD KEEPING REQUIREMENTS PUBLIC ENGAGEMENT

Condition No. 11 is included to require the Company to properly address environmental issues that may arise from the operation of the Facility and to minimize the impact on the environment.

#### 10. NOTIFICATION TO CAP

Condition number 12 is included requiring the Company to notify CAP of any Modification which is environmentally significant.

#### 11. PUBLIC ENGAGEMENT

Condition No. 13 is included to require the Company to properly address environmental issues that may arise from the operation of the Facility and to minimize the impact on the environment.

#### 12. CHANGE OF OWNERSHIP

Condition number 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.

#### 13. REVOCATION OF PREVIOUS APPROVALS

Condition number 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.

#### 14. ACOUSTIC AUDIT

Condition number 16 is included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with this Approval can be verified.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 1439-935T2C issued on October 27, 2014

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

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

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

#### The Notice should also include:

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

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

#### This Notice must be served upon:

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

and

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

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 <a href="https://ero.ontario.ca/">https://ero.ontario.ca/</a>, 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 23rd day of September, 2024

Nancy E Orpana, P.Eng.

Director

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

AH/

c: District Manager, MECP Guelph Gordon Reusing, GHD