

#### ENVIRONMENTAL COMPLIANCE APPROVAL NUMBER A-500-9097726963 Version: 1.0 Issue Date: August 18, 2021

Pursuant to section 20.3 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 and subject to all other applicable Acts or regulations this Environmental Compliance Approval is issued to:

## ARAUCO CANADA LIMITED

657 BASE LINE SAULT STE. MARIE ONTARIO P6A5K6

For the following site:

657 Base Line, Sault Ste. Marie, Ontario.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s) 5741-ARTREE, issued on October 10, 2017.

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 manufacturing Medium Density Fibreboard (MDF), consisting of the following processes and support units:

- materials receiving and handling;
- wood fibre steaming, refining and drying, with two (2) fibre dryers (core and face);
- wood fibre mat forming, hot pressing into fibreboards and curing processes, including a press exhaust capture and treatment system;
- board finishing operations, including cooling, sanding, trimming and moulding;
- three (3) natural gas fired process boilers, each having a maximum heat input of 22,144,450 kilojoules per hour;
- MDF Melamine lamination process;
- a heating system serving the two fibre dryers, consisting of one (1) wood fired combustor, with a maximum heat input of 84,320,000 kilojoules per hour, two (2) sander dust combustors, each having a maximum heat input of 24,300,000 kilojoules per hour, all firing Clean Wood Based Fuels, two (2) auxiliary natural gas fired burners, each having a maximum heat input of 42,160,000 kilojoules per hour and one (1) supplementary natural gas fired burner having a maximum heat input of 9,495,000 kilojoules per hour and heat recovery in a two-stage heat exchanger serving the press thermal fluid system; with the exhaust gases finally directed into a multi-clone cleaner followed by a dry

electrostatic precipitator (ESP) before exhausting either into the resinated fibre dryers or into the atmosphere through the emergency by-pass stack;

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to 38 oven dry tonnes per hour of MDF and 9.3 million surface square metres per year of thermally fused melamine films to MDF panels, discharging to the air as described in the Original ESDM Report.

# DEFINITIONS

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 Atif Bokhari, P.Eng. of AECOM Canada Ltd. and dated June 11, 2020 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility, as updated in accordance with Condition 5 of this Approval;
- 4. "Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarising the results of the Acoustic Assessment Report, as updated in accordance with Condition 5 of this Approval;
- 5. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
- 6. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
- 7. "Best Management Practices Plan" means the plan that is a consolidation outlining of the efforts at the Facility to minimize the nuisance impacts of odour and fugitive dusts that may result from all operations at the Facility,
- 8. "CEM System" means the continuous emission monitoring systems described in Schedule 2;
- 9. "Clean Wood Based Fuels" means wood waste as defined in Regulation 347 of the EPA that is not contaminated with salt or leaded paints/coatings;
- 10. "Company" means Arauco Canada Ltd. that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
- "Compound of Concern" means a contaminant that is described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged from the Facility in an amount that is not negligible;

- 12. "Description Section" means the section on page one of this Approval describing the Company's operations and the Equipment located at the Facility and specifying the Facility Production Limit for the Facility;
- 13. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of part II.1 of the EPA;
- 14. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- 15. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
- 16. "Environmental Assessment Act" means the Environmental Assessment Act, R.S.O. 1990, c.E.18;
- 17. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 18. "Equipment with Specific Operational Limits" means the Wood Combustors firing Clean Wood Based Fuels, including the wood fired combustor and two (2) suspension dust burners, and any Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other Equipment that is specifically referenced in any published Ministry document that outlines specific operational guidance that must be considered by the Director in issuing an Approval;
- 19. "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. "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;
- 21. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
- 22. "Facility" means the entire operation located on the property where the Equipment is located;
- 23. "Fuel Management Plan" means a document or a set of documents which describe measures to ensure that fuels being supplied to the Wood Combustors are appropriate and are managed in a manner that maintains the quality and characteristics of the fuels;
- 24. "Manager" means the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, or any other person who represents and carries out the duties of the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, as those duties relate to the conditions of this Approval;
- 25. "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;
- 26. "Ministry" means the ministry of the Minister;
- 27. "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;
- 28. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers. It also means the noise control measures outlined in the Acoustic Assessment Report;

- 29. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution Local Air Quality;
- 30. "Original ESDM Report" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by AECOM Canada Ltd. and dated July 8, 2020, submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
- 31. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
- 32. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
- 33. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
- 34. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
- 35. "Process Outages" means the process changes that reduce the demand for heat from the Wood Combustors;
- 36. "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;
- "Publication NPC-207" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the Ministry, August 1978, as amended;
- 38. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
- "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources - Approval and Planning, Publication NPC-300", August 2013, as amended;
- 40. "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.
- 41. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
  - Schedule 1 Supporting Documentation;
  - Schedule 2 Continuous Emission Monitoring System;
  - Schedule 3 Source Testing Procedure.
- 42. "Shut-down" means an operating condition during which the operation of a source of contaminant is decreased from normal operating conditions to an inoperative state;
- 43. "Source Testing" means site-specific sampling and testing to measure emissions resulting from operating the targeted sources under operating conditions that will derive an emission rate that, for the relevant averaging period of the contaminant, is at least as high as the maximum emission rate that the source of contaminant is reasonably capable of, within the approved operating range of the targeted sources which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
- 44. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;

- 45. "Start-up" means an operating condition during which the operation of the Wood Combustors is increased from an inoperative state to normal operating conditions;
- 46. "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;
- 47. "Wood Combustors" means the wood fired combustor and two (2) suspension sander dust burners, described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval;
- 48. "Written Summary Form" means the electronic questionnaire form, available on the Ministry website, and supporting documentation, that documents the activities undertaken at the Facility in the previous calendar year;

# **TERMS AND CONDITIONS**

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

## 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 1 Supporting Documentation.
- Schedule 2 Continuous Emission Monitoring System.
- Schedule 3 Source Testing Procedure.

## 2. LIMITED OPERATIONAL FLEXIBILITY

- 1. Pursuant to section 20.6 (1) of the EPA and subject to Conditions 2.2 and 2.3 of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are Modifications to the Facility that:
  - a. are within the scope of the operations of the Facility as described in the Description Section of this Approval;
  - b. do not result in an increase of the Facility Production Limit above the level specified in the Description Section of this Approval; and
  - c. result in compliance with the performance limits as specified in Condition 4.
- 2. Condition 2.1 does not apply to,
  - a. the addition of any new Equipment with Specific Operational Limits or to the Modification of any existing Equipment with Specific Operational Limits at the Facility; or
  - 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 describe 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 paragraph 1 of this condition, 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 3.1 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 the Noise Control Measures as outlined in the Acoustic Assessment Report;
  - b. ensure, at all times, that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300; and
  - 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 Conditions No. 10 in this Approval.

## 5. DOCUMENTATION REQUIREMENTS

- 1. The Company shall maintain an up-to-date Log.
- 2. No later than March 31 in each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
- 3. 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.

## 6. REPORTING REQUIREMENTS

- 1. Subject to Condition 6.2, the Company shall provide the Director no later than June 30 of each year, a Written Summary Form to be submitted through the Ministry's website that shall include the following:
  - a. a declaration of whether the Facility was in compliance with section 9 of the EPA, O. Reg. 419/05 and the conditions of this Approval;
  - b. a summary of each Modification satisfying Condition 2.1.a and 2.1.b that took place in the previous calendar year that resulted in a change in the previously calculated concentration at a Point of Impingement for any Compound of Concern or resulted in a change in the sound levels reported in the Acoustic Assessment Summary Table at any Point of Reception.
- 2. Condition 6.1 does not apply if Condition 2.1 has expired.

## 7. OPERATION AND MAINTENANCE

- 1. The Company shall prepare and implement, not later than three (3) months from the date of this Approval, operating procedures and maintenance programs for all Processes with Significant Environmental Aspects, which shall specify as a minimum:
  - a. frequency of inspections and scheduled preventative maintenance;
  - b. procedures to prevent upset conditions;
  - c. procedures to minimize all fugitive emissions;
  - d. procedures to prevent and/or minimize odorous emissions;
  - e. procedures to prevent and/or minimize noise emissions; 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 prepare not later than six (6) months after the date of issuance of this Approval, implement and continue to update as necessary, the Best Management Practices Plan for the control of fugitive odour and particulate emissions from the Facility. The Best Management Practices Plan shall include:
  - a. identification of sources of fugitive odour and particulate emissions, such as:
    - i. on-site traffic, paved/unpaved roads/areas;
    - ii. loading/unloading areas and equipment and loading/unloading techniques;
    - iii. materials transferring, handling and storage;
    - iv. building general ventilation systems; and
    - v. exposed openings in process and storage buildings.
  - b. description of the preventative and control measures to minimize fugitive odour and particulate emissions from the identified sources.
  - c. an implementation schedule for the implementation of the Best Management Practices Plan, including training of facility personnel.

- d. inspection and maintenance procedures to ensure effective implementation of the Best Management Practices Plan.
- e. procedures for verification and recording the progress of the implementation of the Best Management Practices Plan.
- f. a summary of the actions taken and achievements made under the Best Management Practices Plan as of December 31 of the previous calendar year.

#### 8. COMPLAINTS RECORDING AND REPORTING

- 1. If at any time, the Company receives an environmental complaint from the public regarding the operation of the Equipment approved by this Approval, the Company shall take the following steps:
  - a. Record and number each complaint, either electronically or in a log book. The record shall include 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 compliant and set out steps to be taken to avoid the recurrence of similar incidents.

#### 9. RECORD KEEPING REQUIREMENTS

- 1. Any information requested by any employee in or agent of the Ministry concerning the Facility and its operation under this Approval, including, but not limited to, any records required to be kept by this Approval, shall be provided to the employee in or agent of the Ministry, upon request, in a timely manner.
- 2. Unless otherwise specified in this Approval, the Company shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this Approval, including,
  - a. a copy of the Original ESDM Report and each updated version;
  - b. a copy of each version of the Acoustic Assessment Report;
  - c. supporting information used in the emission rate calculations performed in the ESDM Reports and Acoustic Assessment Reports;
  - d. the records in the Log;
  - e. copies of each Written Summary Form provided to the Ministry under Condition 6.1 of this Approval;
  - f. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects; and

g. all records related to environmental complaints made by the public as required by Condition 8 of this Approval.

## 10. EQUIPMENT WITH SPECIFIC REQUIREMENTS - WOOD COMBUSTORS.

#### 1. PERFORMANCE REQUIREMENTS

The Company shall ensure that the Wood Combustors are designed and operated to comply, at all times, with the following operational and performance requirements:

- a. The concentration of oxygen in the undiluted gas emitted from the Wood Combustors, as measured and recorded by the CEM System, shall not be less than 4 per cent by volume on a 3-hour rolling average and dry basis;
- b. The 10-day rolling average concentration of carbon monoxide in the undiluted gases emitted from the Wood Combustors, as measured and recorded by the CEM System, shall not exceed 500 parts per million by volume, on a dry basis normalized to 11 percent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals;
- c. The in-stack concentration of total suspended particulate matter, in the undiluted gases leaving the Wood Combustors, shall not exceed 120 milligrams per dry cubic metre normalized to 11 percent oxygen at reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals.
- d. The Company shall take reasonable steps to ensure that the operation of the Wood Combustors meet the following targets: The operating temperature of the Wood Combustors shall not be less than 1,000 degrees Celsius at a residence time of not less than 1 second, as measured in the combustion chamber of the Wood Combustors.
- e. Requirements in sections a, b, c and d do not apply during the Start-up and Shut-down periods of the Wood Combustors if,
  - i. the Shut-down does not last for more than 6 hours,
  - ii. the Start-up does not last for more than 24 hours, and
  - iii. the Start-up or Shut-down is conducted according to a written plan that minimizes discharges into the air during the period of start-up or shut-down.

#### 2. NOTIFICATION REQUIREMENTS

- a. The Company shall notify the District Manager, in writing either via email or letter, of each exceedance of the carbon monoxide limit specified in Condition 10.1.b, within five (5) business days of the exceedance. The notification shall include:
  - i. The type of wood being processed;
  - ii. The moisture content of the material;
  - iii. Pollution control device parameters;
  - iv. Continuous emission monitor data; and
  - v. Results of investigation on the cause(s) of the exceedance and remedial action(s) taken if deemed required.
- b. The Company shall make available upon request by the District Manager Performance Data of the Wood Combustors.

#### 3. CONTINUOUS MONITORING

The Company shall continue to conduct and maintain a program to continuously monitor the concentration of oxygen and carbon monoxide in the undiluted gas emitted from the Wood Combustors, and the temperature of the hot combustion gases in the Wood Combustors. The Continuous Monitoring System shall be equipped with continuous recording devices and shall comply with the requirements outlined in the attached Schedule 2.

#### 4. SOURCE TESTING

The Company shall perform Source Testing, in accordance with the procedures outlined in Schedule 3, to determine the rate of emission of Total Suspended Particulate Matter and Benzoa-Pyrene from the Wood Combustors, not later than July 1, 2022 and every four (4) years thereafter.

## 5. BI-ANNUAL TUNE-UP OF THE WOOD COMBUSTORS

The Company shall conduct, within six (6) months from the date of this Approval and repeat every two (2) years thereafter, a tune-up of the Wood Combustors to assist in achieving effective combustion. The tune-up shall include but not be limited to:

- a. Physical inspection of the following:
  - i. fuel handling equipment;
  - ii. fuel distribution equipment;
  - iii. air dampers;
  - iv. air measurement devices;
  - v. grates or burners;
- b. Review of equipment performance including:
  - i. carbon monoxide and oxygen data;
  - ii. airflow data;
  - iii. steam flow to bark data;
  - iv. air to fuel ratio data and verify operating within design criteria;
  - v. calibration data and performance of the Continuous Monitoring System;
- c. Conduct combustion test, including:
  - i. visual observation of combustion;
  - ii. monitor and adjust excess air ratio;
  - iii. monitor oxygen and carbon monoxide data;
- d. A report shall be prepared for each tune-up, retained for a minimum of five (5) years after its creation, and made available for review by the Ministry upon request.

#### 6. FUEL MANAGEMENT

The Company shall prepare not later than six (6) months after the date of this Approval, implement, maintain and update as necessary the Fuel Management Plan. The Fuel Management Plan shall include, but not be limited to:

- a. A list of the types of wood fuel that may be stored at the Facility;
- b. For each type of wood fuel listed, an identification of the parameters that will demonstrate the storage quality of the wood fuel, including size and moisture content;

- c. For each parameter identified under each fuel, a determination of a range of values within which the wood fuel will be considered of acceptable quality for storage at the Facility;
- d. A procedure to ensure that the wood fuel is tested and that the value for each parameter identified under each fuel is within the range determined to be considered of acceptable quality for the parameter;
- e. A procedure to ensure the wood fuel is inspected on a regular basis and that the inspection includes an inspection of the pile and of the feed system;
- f. A procedure to ensure that wood fuel not considered acceptable for storage at the Facility is rejected and not stored at the Facility;
- g. An indication of the maximum time that a wood fuel may be stored at the Facility;
- h. A pile turn-over procedure to ensure that wood fuel that have been stored at the Facility longest is used first;
- i. A procedure to ensure that records are prepared and retained at the Facility that set out:
  - i. the quantity of wood fuel purchased by the Facility and the source from which it was purchased;
  - ii. the quantity of wood fuel generated at the Facility, and
  - iii. the quantity of wood fuel rejected for storage at the Facility and the reasons for the rejection.

## 7. SUMMARY REPORTS

The Company shall prepare, not later than two (2) years after the date of this Approval and once every two (2) years, a Summary Report to summarize the performance and monitoring requirements included in this Approval. Each Summary Report shall include:

- a. For each parameter listed in this Approval which testing or continuous monitoring is required, the following statistical information:
  - i. The maximum measurement taken over the two-year period;
  - ii. The minimum measurement taken over the two-year period;
  - iii. The average measurement taken over the two-year period.
- b. A record of all notices required in condition 10.2 to be given during the two-year period.
- c. The dates during the two-year period when Start-up or Shut-down of the Wood Combustors occurred.
- d. A record of approved Fuel Management procedures and details of instances where these were not followed, if any.
- e. For each pollution control device associated with the Wood Combustors, and the CEM System, the dates during the two-year period when the device did not operate.
- f. A record of the results from the bi-annual tune-up required in this Approval.

## 11. 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.

## REASONS

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 1 considered by the Director in issuing this Approval.

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

Conditions No. 2, 3 and 4 are included to limit and define the Modifications permitted by this Approval, and to set out the circumstances in which the Company shall request approval of an Acceptable Point of Impingement Concentration prior to making Modifications. The holder of the Approval is approved for operational flexibility for the Facility that is consistent with the description of the operations included with the application up to the Facility Production Limit. In return for the operational flexibility, the Approval places performance based limits that cannot be exceeded under the terms of this Approval. Approval holders will still have to obtain other relevant approvals required to operate the Facility, including requirements under other environmental legislation such as the Environmental Assessment Act.

#### 3. DOCUMENTATION REQUIREMENTS

Condition No. 5 is included to require the Company to maintain ongoing documentation that demonstrates compliance with the performance limits as specified in condition 4 of this Approval and allows the Ministry to monitor on-going compliance with these performance limits. The Company is required to have an up to date ESDM Report and Acoustic Assessment Report that describe the Facility at all times and make the Emission Summary Table and Acoustic Summary Table from these reports available to the public on an ongoing basis in order to maintain public communication with regard to the emissions from the Facility.

#### 4. REPORTING REQUIREMENTS

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

## 5. OPERATION AND MAINTENANCE

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

## 6. COMPLAINTS RECORDING AND REPORTING PROCEDURE

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

## 7. RECORD KEEPING REQUIREMENTS

Condition No.. 9 is included to require the Company to retain all documentation related to this Approval and provide access to employees in or agents of the Ministry, upon request, so that the

Ministry can determine if a more detailed review of compliance with the performance limits as specified in condition 4 of this Approval is necessary.

## 8. EQUIPMENT WITH SPECIFIC REQUIREMENTS - WOOD COMBUSTORS

Condition No. 10 is included to require the Company to provide the minimum performance and operational requirements considered necessary to prevent an adverse effect resulting from the operation of the Wood Combustors.

## 9. REVOCATION OF PREVIOUS APPROVALS

Condition No. 11, 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.

## **APPEAL PROVISIONS**

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

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

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

1. The name of the appellant;

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

And the Notice should be signed and dated by the appellant. This Notice must be served upon:

The Secretary\* Environmental Review Tribunal

The Minister of the Environment, Conservation and Parks The Director appointed for the purposes of Part II.1 of the Environmental Protection Act

| 655 Bay Street,<br>Suite 1500<br>Toronto,<br>Ontario | AND | 777 Bay Street, 5th Floor<br>Toronto, Ontario<br>M7A 2J3 | AND | Ministry of the Environment,<br>Conservation and Parks<br>135 St. Clair Avenue West, 1st Floor<br>Toronto, Ontario |
|--|-----|--|-----|--|
| M5G 1E5  |     |  |     | M4V 1P5  |

\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or https://olt.gov.on. ca/tribunals/ert/about-the-ert/

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 www.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 18th day of August, 2021

lengel RfL

Neryed Ragbar

Director

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

c: Atif Bokhari, AECOM Canada Ltd. Danielle Arsenault, AECOM Canada Ltd. Trevor Speck Danielle Arsenault, EACOM Danielle Arsenault, EACOM Canada Ltd

The following schedules are a part of this environmental compliance approval:

# **SCHEDULE 1**

## **Supporting Documentation**

- 1. Environmental Compliance Approval Application, dated August 27, 2020, signed by Trevor Speck and submitted by the Company;
- 2. Emission Summary and Dispersion Modelling Report, prepared by AECOM Canada Ltd. and dated July 8, 2020;
- 3. Acoustic Assessment Report, prepared by Atif Bokhari, P.Eng. of AECOM Canada Ltd. and dated June 11, 2020.

## **Continuous Emission Monitoring Systems**

## A- PARAMETER: Temperature

## LOCATION:

The sample point for the Continuous Temperature Monitor shall be located at the top of the combustion chamber in the Wood Combustors where the measurement give the actual operating temperatures at a minimum retention time of one (1) second in the combustion chamber of the Wood Combustors.

## **PERFORMANCE:**

The Continuous Temperature Monitoring system shall meet the following minimum performance specifications for the following parameters.

Type: shielded "K" type thermocouple, or equivalent Accuracy:  $\pm 1.5$  percent of the minimum gas temperature

#### **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 1 minute or better.

## **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time, on a monthly basis, when the Equipment is in operation.

## **B- PARAMETER: Oxygen**

## **INSTALLATION:**

The Continuous Oxygen Monitor shall be installed at an accessible location where the measurements are representative of the actual concentration of oxygen in the undiluted gases leaving the Wood Combustors and verify the oxygen requirement in the Performance Requirements listed in this Approval, and shall meet the following installation specifications:

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.

Span Value: 2 times the average normal concentration of the source Relative Accuracy : +/- 10 percent of the mean value of the reference method test data Calibration Error: maximum 0.25 percent O2 System Bias: maximum 4 percent of the mean value of the reference method test data Procedure for Zero and Span Calibration: Check All system components checked Zero Calibration Drift (24-hour): maximum 0.5 percent O2 Span Calibration Drift (24-hour: maximum 0.5 percent O2 Response Time (90 percent response to a step change) : maximum 90 seconds Operational Test Period: minimum 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 95 percent of the time, on a monthly basis, when the Equipment is in operation.

#### C- PARAMETER: Carbon Monoxide

#### **INSTALLATION:**

The Continuous Carbon Monoxide Monitor shall be installed at an accessible location where the measurements are representative of the actual concentration of carbon monoxide in the undiluted gases leaving the Wood Combustors and shall meet the following installation specifications:

Range (parts per million, ppm) : highest concentration anticipated from the source Calibration Gas Ports: close to the sample point

#### **PERFORMANCE:**

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

Span Value (nearest ppm equivalent): 2 times the average normal concentration of the source Relative Accuracy: maximum10 percent of the mean value of the reference method test data or  $\pm$  5 ppm, whichever is greater

Calibration Error: maximum 2 percent of actual concentration

System Bias: maximum 4 percent of the mean value of the reference method test data Procedure for Zero and Span Calibration: Check All system components checked Zero Calibration Drift (24-hour) : maximum 5 percent of the span value Span Calibration Drift (24-hour) : maximum 5 percent of the span value Response Time (90 percent response to a step change): maximum 90 seconds Operational Test Period : minimum 168 hours without corrective maintenance

#### **CALIBRATION:**

The monitor shall be calibrated, to ensure that it meets the drift limits specified above, during the periods of the operation of the Combustor. The results of all calibrations shall be recorded at the time of calibration.

#### **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 30 seconds 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.

# **SCHEDULE 3**

## **Source Testing Procedure**

- 1. The Company shall submit, not later than two (2) months prior to the targeted date for the Source Testing to the Manager, a Pre-Test Plan for the Source Testing required under this Approval.
- 2. The Company shall finalize the Pre-Test Plan in consultation with the Manager.
- 3. The Company shall not commence the Source Testing required under this Approval until the Manager has approved the Pre-Test Plan.
- 4. The Company shall notify the Manager, District Manager, and Director in writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to the Source Testing.
- 5. The Company shall submit a report on the Source Testing to the Manager, District Manager, and Director not later than three (3) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
  - a. an executive summary;
  - b. records of operating conditions at the time of Source Testing including but not limited to the following:
    - i. production data;
    - ii. Facility/process information related to the targeted source;
    - iii. description of the emission sources controlled by the targeted source at the time of testing;
    - iv. operational description of the general building ventilation at the time of testing;
  - c. all records produced by the continuous monitoring systems;
  - d. results of Source Testing, including the emission rates and emission concentrations of the test contaminants;
  - e. a tabular comparison of Source Testing results for the test contaminants to original emission estimates described in the Company's application and the ESDM Report;
- 6. If the Source Testing results are higher than the emission estimates in the Company's ESDM Report, the Company shall update their ESDM Report in accordance with section 26 of O.Reg. 419/05 with the results from the Source Testing report and make these records available for review by staff of the Ministry upon request. The updated Emission Summary Table from the updated ESDM Report shall be submitted with the report on the Source Testing.
- 7. The Director may not accept the results of the Source Testing if:
  - a. the Source Testing Code or requirements of the Manager were not followed;
  - b. the Company did not notify the Manager, District Manager and Director of the Source Testing; or
  - c. the Company failed to provide a complete report on the Source Testing.
- 8. If the Director does not accept the results of the Source Testing, the Director may require re-testing. If re-testing is required, the Pre-Test Plan strategies need to be revised and submitted to the Manager for approval. The actions taken to minimize the possibility of the Source Testing results not being accepted by the Director must be noted in the revision.

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