

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

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 4743-CZQRCS Issue Date: February 28, 2024

Thunder Bay Pulp and Paper Inc. 2001 Neebing Avenue Thunder Bay, Ontario P7E 6S3

Site Location: 2001 Neebing Avenue Thunder Bay City, District of Thunder Bay P7E 6S3

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

A newsprint, specialty papers and kraft market pulp manufacturing facility, consisting of the following processes and support units:

- Fibre Line;
- Kraft Bleach Plant;
- Kraft Chemical Plant;
- Kraft Digester;
- Kraft Pulp Machine;
- Kraft Recaust Area;
- Kraft Recovery Area (C Recovery Boiler and associated equipment);
- Newsmill Finishing & Shipping;
- Paper Machine 5;

- Thermal Mechanical Pulping;
- Water Quality Operations;
- Maintenance Garage;
- Chip Transfer Operation;
- Mobile Wood Grinding
- Steam Generation Operations, including four (4) steam turbines, designated as Turbine No. 3, 4, 5 and 6, with electrical generation capacities of 18, 19.5, 26 and 60 megawatts, respectively, and the following boilers:
 - one (1) natural gas fired steam boiler, designated as Power Boiler No. 4, with a maximum heat input of 275.5 megajoules per hour, discharging into the atmosphere through a stack, having a exit diameter of 4.0 metres, extending 49.0 metres above grade and 31.6 metres above the roof;
 - one (1) non-contact cooling tower.
 - one (1) Wood Fuel Combustion System, designated as Power Boiler No. 3, having a maximum combustion capacity of 36 tonnes per hour of Wood Fuel, exhausted via a stack extending 40.6 metres above grade, having an exit diameter of 4.2 metres and equipped with the following:
 - one (1) boiler complete with dump grate and pneumatic discharge, furnace dimensions of 4.6 metre depth by 5.9 metre width and approximate furnace volume of 390 cubic metres;
 - one (1) forced draft combustion air fan having a capacity of 40.8 cubic metres per second at 38 degrees Celsius;
 - one (1) induced draft exhaust fan having a capacity of 107.4 cubic metres per second at 213 degrees Celsius;
 - one (1) multiclone complete with 230 tubes; and
 - one (1) venturi type scrubber to control suspended particulate matter from the boiler, having a diameter of 5.88 metres, an overall height of 15 metres, a maximum volumetric capacity of 60 normal cubic metres per hour, using as scrubbing fluid a sodium hydroxide solution in water, having a concentration of 50 percent sodium hydroxide, at a maximum rate of 7,945 litres per minute and operating at pressure drop of 4.36 kilopascals and equipped with an entrainment separator-mist eliminator.

- one (1) Combustion System, designated as Power Boiler No. 6, having a maximum combustion capacity of 1362 bone dried tonnes of Wood fuel per day, exhausted via a stack extending 62 metres above grade, having an exit diameter of 3.35 metres and equipped with the following:
 - one (1) Combustion Engineering Model VU40 boiler equipped with natural gas burners with the maximum heat input of 275 megawatts (MW), complete with vibrating conveyor grate complete with fuel distributors and distributor air fan and pneumatic discharge, furnace dimensions of 7.3 metres depth by 7.6 metres width and approximate furnace volume of 1,340 cubic metres;
 - one (1) forced draft combustion air fan, having a capacity of 96 cubic metres per second at 38 degrees Celsius;
 - one (1) induced draft exhaust fan, equipped with Variable Frequency Drive, having a capacity of 204 actual cubic metres per second at 224 degrees Celsius;
 - one (1) Combustion Engineering, Model Viscodyne settling chamber;
 - one (1) Joy Manufacturing, Type SYGR14 Size 6 8-13 multicone;
 - one (1) Environmental Elements Corporation, electrostatic precipitator consisting of one chamber and operating with 3 energized fields out of total of four fields with the total active collection area of approximately 6,958 square metres and a gas volume of 167 cubic metres at operating temperature of 194 degrees Celsius;
 - one (1) combustion air system, comprising dampers, nozzles and associated instrument, including upgraded overfire air system;
 - one (1) fuel infeed system, comprising reclaimer, taper slot screen, fuel-sizing equipment, conveyors, chutes, screw-metering feeders, metal detector and associated instrumentation.

including the Equipment and any other ancillary and support processes and activities, exhausting to the atmosphere as described in the ESDM Report, and operating at Facility Production Limits listed in the table below:

Facility Production Limits

Facility	Annual Production Limits
Kraft Mill	360,000 air dried tonnes per year
News Mill	401,500 air dried tonnes per year
Thermal Mechanical Pulp Plant	365,000 air dried tonnes per year

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, prepared by Gillian Redman / RWDI AIR Inc. and dated November 24, 2023, 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. "Commissioning period" means the 90-day period following the first start-up of a new or significantly modified large wood-fired combustor.
- "Company" means Thunder Bay Pulp and Paper Inc. that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
- "Compound of Concern" means a contaminant that is not registered by the Company on the Technical Standards Registry, and 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;
- 13. "Continuous Monitoring Plan" means a plan to continuously monitor the concentration of oxygen and carbon monoxide in the undiluted gas emitted from the combustion chamber of the Wood Fuel Combustors, the temperature of the hot combustion gases in the Wood Fuel Combustors, and the opacity of the gases leaving Power Boiler No.6.
- 14. "Continuous Monitoring System" means the continuous emission monitoring system described in the Continuous Monitoring Plan, consisting of continuous monitors and recording devices;
- 15. "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;

- 16. "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;
- 17. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
- 19. "Environmental Assessment Act" means the Environmental Assessment Act, R.S.O. 1990, c.E.18;
- 20. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 21. "Equipment" means equipment or processes described in the ESDM Report, the Technical Standard(s) for which the Company is registered on the Technical Standards Registry, this Approval and in the Schedules referred to herein and any other equipment or processes;
- 22. "Equipment with Specific Operational Limits" means **Power Boilers No. 3, 4 and 6, and the steam turbines No. 3, 4, 5 and 6**, any Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other Equipment that is specifically referenced in any published Ministry document that outlines specific operational guidance that must be considered by the Director in issuing an Approval;
- 23. "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
- 24. "Facility" means the entire operation located on the property where the Equipment is located;
- 25. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
- 26. "Fuel Management Plan" means a document or a set of documents prepared by the Company to provide written instructions to staff of the Company.
- 27. "Highest Ranking Person" means the highest ranking person regularly present at the Facility who has management responsibilities relating to the Facility;
- 28. "Hogged Wood Fuel" means an unprocessed mix of coarse chips of bark and wood fibre generated by grinding or chipping action;

- 29. "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 Noise Control Measures for the Facility and/or Equipment.
- 30. "Log" means a document that contains a record of each change that is required to be made to the ESDM Report and Acoustic Assessment Report, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a Point of Impingement and all changes to information associated with a Modification to the Facility that satisfies Condition 2;
- 31. "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;
- 32. "Minister" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the EPA under the Executive Council Act;
- 33. "Ministry" means the ministry of the Minister;
- 34. "Modification" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the Facility that may (a) discharge or alter the rate or manner of discharge of a Compound of Concern to the air; or (b) discharge or alter the rate or manner of discharge of a contaminant registered by the Company on the Technical Standards Registry; or (c) discharge or alter noise or vibration emissions from the Facility;
- 35. "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 Publication NPC-300. It also means the Noise Abatement Action Plan outlined in Appendix H of the Acoustic Assessment Report;
- 36. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers. It also means the noise control measures outlined in Appendix C and Appendix H of the Acoustic Assessment Report;
- 37. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution Local Air Quality, made under the EPA;

- 38. "Original ESDM Report" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by RWDI AIR Inc. and dated March 24, 2022 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
- 39. "Paper Sludge" means waste wood fibre from the liquid effluent primary treatment system;
- 40. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
- 41. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
- 42. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
- 43. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
- 44. "Processes with Significant Environmental Aspects" means the Equipment which, during regular operation, would discharge (a) a Compound of Concern 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 or (b) a contaminant registered by the Company on the Technical Standards Registry;
- 45. "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;
- 46. "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;
- 47. "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;
- 49. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
 - Schedule A Supporting Documentation
 - Schedule B Source Testing Procedure
 - Schedule C Technical Standards for which the Company is Registered

- 50. "Source Testing" means site-specific sampling and testing to measure emissions resulting from operating the equipment 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, or a rate approved by the Manager within the approved operating range of the equipment which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
- 51. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended.
- 52. "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.
- 53. "Start-up" means an operating condition during which the operation of a source of contaminant is increased from an inoperative state to normal operating conditions.
- 54. "Technical Standard" has the same meaning as in section 1 of O. Reg. 419/05;
- 55. "Technical Standards Registry" means the Ministry's Technical Standards Registry Air Pollution for Technical Standard registrations described in section 39 of O. Reg. 419/05 made under the EPA;
- 56. "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;
- 57. "Wood Chips" means a piece of wood of a defined size, cut or chipped from a larger piece of wood;
- 58. "Wood Fuel" means fuel comprised of one or more of the following materials: Hogged Wood Fuel, Wood Chips, Wood Pellets, bark, sawdust, Woodwaste, cellulosic plant material, paper and Paper Sludge;
- 59. "Wood Fuel Combustors" means the Wood Fuel Combustion System designated as Power Boiler No. 3 and the Combustion System designated as Power Boiler No. 6, described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- 60. "Wood Pellets" means a pellet made from Wood Fuel or Woodwaste;
- 61. "Woodwaste" means woodwaste as defined in Ontario Regulation 347 R.R.O. 1990, as amended;
- 62. "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 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 or result in compliance with requirements of a Technical Standard for which the Facility is registered on the Technical Standards Registry.
- 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, unless the addition or Modification is necessary in order to comply with a requirement of a Technical Standard for which the Facility is registered; 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 not later than December 31, 2027, the Noise Control Measures outlined phase 1 of the Noise Abatement Action Plan;
 - b. implement not later than December 31, 2030, the Noise Control Measures outlined in phase 2 of the Noise Abatement Action Plan;
 - c. implement not later than December 31, 2033, the Noise Control Measures outlined in phase 3 of the Noise Abatement Action Plan;
 - d. undertake life-cycle replacement of existing Equipment with quieter Equipment;

- e. ensure, subsequent to the implementation of the Noise Control Measures that the noise emissions from the Facility comply with the limits set in Ministry Publication NPC-300; and
- f. 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, 11, 12, 13, 14, 15, and 16 in this Approval, unless such operation is addressed by requirement in a Technical Standard for which the Facility is registered.

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. 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.

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. Condition 7.1 does not apply with respect to Processes with Significant Environmental Aspects which have requirements under a Technical Standard for which the Company is registered that are equivalent to the operating procedures and maintenance programs set out in Condition 7.1.
- 3. Condition 7.2 does not apply with respect to procedures to prevent and/or minimize noise emissions.
- 4. 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.
- 5. The Company shall monitor and report emissions of TRS, TSP, and meteorological data of wind speed and wind direction in accordance with the Air Quality Monitoring Manual and the following requirements:
 - a. Monitoring data shall be obtained and collected at the ambient air monitoring stations located in the community listed below or at locations acceptable to and approved in writing by the District Manager:

Location	Ambient Air Monitoring Station Number	Parameters to be Monitored
Frederica Street	63500	TRS TSP [Hi-Vol particulate] Wind speed and wind direction
Bailey Avenue	63510	TRS TSP [Hi-Vol particulate] Wind speed and wind direction

- b. Ambient air monitoring stations shall be located, operated and maintained in accordance with the Air Quality Monitoring Manual;
- c. Emissions of TRS,TSP and meteorological data of wind speed/velocity, as noted in Condition 7.5(a), shall be reported to the District Manager in accordance with the Air Quality Monitoring Manual, or any other method acceptable to and approved in writing by the District Manager; and
- d. Emissions of TRS,TSP and meteorological data of wind speed/velocity shall be made available to the public in a timely and accessible manner, acceptable to and approved in writing by the District Manager.

8. COMPLAINTS RECORDING AND REPORTING

- 1. If at any time, the Company receives an environmental complaint from the public regarding the operation of the Equipment approved by this Approval, the Company shall take the following steps:
 - a. Record and number each complaint, either electronically or in a log book. The record shall include the following information: the time and date of the complaint and incident to which the complaint relates, the nature of the complaint, wind direction at the time and date of the incident to which the complaint relates and, if known, the address of the complainant.
 - b. Notify the District Manager of the complaint within two (2) business days after the complaint is received, or in a manner acceptable to the District Manager.
 - c. Initiate appropriate steps to determine all possible causes of the complaint, and take the necessary actions to appropriately deal with the cause of the subject matter of the complaint.
 - d. Complete and retain on-site a report written within five (5) business days of the complaint date. The report shall list the actions taken to appropriately deal with the cause of the complaint and set out steps to be taken to avoid the recurrence of similar incidents.
- 2. Condition 8.1 does not apply with respect to Equipment which has requirements under a Technical Standard for which the Company is registered that are equivalent to the complaints recording and response procedures set out in Condition 8.1.
- 3. Condition 8.2 does not apply with respect to complaints recording and response procedures pertaining to noise emissions.

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 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.

10. SOURCE TESTING

 The Company shall, within twelve (12) months of the date of the Approval and repeat every four (4) years thereafter, perform Source Testing, following the Source Testing Procedure outlined in Schedule B, to determine the emission rate of Total Suspended Particulate Matter and Benzo(a)pyrene from the Wood Fuel Combustors.

11. CONTINUOUS MONITORING

- 1. The Company shall, install, conduct and maintain the Continuous Monitoring System in accordance with the Continuous Monitoring Plan as approved by the Manager.
- 2. The Company, as part of a regular inspection program, shall measure, inspect and record the following parameters once daily from the venturi scrubber equipped to Power Boiler No.3:
 - a. static pressure drop across the throat of the venturi scrubber;
 - b. flow rate of the recirculated scrubbing fluid of the venturi scrubber, with an alarm set to low flow conditions;
 - c. pH of the scrubbing fluid of the venturi scrubber.

- 3. The Company shall, develop a list of operating parameters affecting the collection efficiency of the electrostatic precipitator (such as voltage, sparking frequency, rapping frequency, a gas flow indicator and similar) equipped to Power Boiler No.6 and record the values of these parameters on hourly basis or some other time period which is acceptable to the District Manager;
- 4. The Company shall measure and record the type and feed rates of Wood Fuel to the Wood Fuel Combustors on a daily basis and retain these records for a minimum of three (3) years.

12. PERFORMANCE

- 1. The Company shall ensure that the Wood Fuel Combustors are designed and operated to comply, at all times, with the following performance requirements:
 - a. The concentration of oxygen in the undiluted gas emitted from the combustion chamber of the Wood Fuel Combustors shall not be less than 4 per cent by volume on a 3-hour rolling average and dry basis.
 - b. The concentration of particulate matter emitted from the Wood Fuel Combustors is not greater than 120 milligram per dry cubic meter, normalized to 11 per cent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals
 - c. The concentration of carbon monoxide in the undiluted gas emitted from the Wood Fuel Combustors is not greater than 500 parts per million on a dry basis, normalized to 11 per cent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals, 10-day rolling averaging.
- 2. The Company shall take reasonable steps to ensure that the operation of the Wood Fuel Combustors meets the following targets:
 - a. The temperature in the combustion chamber of Power Boiler No.3 and Power Boiler No.6, as recorded by the continuous temperature monitoring system required by this Approval, shall be at least 1000 degrees Celsius, and
 - b. The residence time, of the products of combustion and the combustion air, in the combustion chamber of Power Boiler No.3 and Power Boiler No.6 shall not be less than one (1) second.
- 3. Requirements in Conditions 12.1 and 12.2. (b) do not apply during the following periods:
 - a. The Commissioning Period of Power Boiler No.3 and Power Boiler No.6.
 - b. The Start-up and Shut-down periods of Power Boiler No.3 and Power Boiler No.6 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,
- 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.
- 4. No fuels other than those as approved by this Approval shall be used as fuel in the Wood Fuel Combustors.

13. BI-ANNUAL TUNE-UP

- 1. The Company shall conduct, within two (2) years of the date of this Approval and repeat every two (2) years thereafter, a tune-up of the Wood Fuel 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. combustion air system
 - iv. air measurement devices
 - v. grates or burners
 - b. Review of equipment performance:
 - i. review carbon monoxide and oxygen data
 - ii. review airflow data
 - iii. review air to fuel ratio data and verify operating within design criteria
 - iv. review calibration data and performance of the continuous monitoring system
 - c. Conduct combustion test:
 - i. visual observation of combustion
 - ii. monitor and adjust excess air ratio
 - iii. monitor oxygen and carbon monoxide data

- 2. 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. The report shall include, but not be limited to:
 - a. summary of the results from the tune-up
 - b. summary of recommendations to be implemented to ensure proper combustion
 - c. an implementation schedule, indicating the time frame for the implementation of the recommendations provided in the report.

14. FUEL MANAGEMENT PLAN

- 1. The Company shall, not later than three (3) months from the date of this Approval, prepare a Fuel Management Plan for the Wood Fuel Combustors. The Company shall update the Plan as necessary. The Plan shall include, but not be limited to:
 - a. A list of the types of fuels that may be stored at the Facility.
 - b. For each type of fuel listed in item (a), an identification of the parameters that will demonstrate the storage quality of the fuel, including size and moisture content.
 - c. For each parameter identified under item (b), a determination of a range of values within which the fuel will be considered of acceptable quality for storage at the Facility.
 - d. A procedure to ensure that the fuel is tested to ensure that the value for each parameter identified under item (b) is within the range determined under item (c) for the parameter.
 - e. A procedure to ensure the 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 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 fuel may be stored at the Facility.
 - h. A pile turn-over procedure to ensure that 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 fuel purchased by the Facility and the source from which it was purchased,

- ii. the quantity of fuel generated at the Facility, and
- iii. the quantity of fuel rejected for storage at the Facility, in accordance with paragraph (6), and the reasons for the rejection.
- j. An operations manual for the combustion of each type of fuel listed in item (a) that outlines the operating procedure to be maintained to continuously meet the requirements of Condition 12 of this Approval.
- 2. The Company shall immediately implement and maintain the Fuel Management Plan.

15. NOTIFICATION REQUIREMENTS

- 1. 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 12.1, within two (2) business days of the exceedance. The notification shall include:
 - a. The type of wood being processed;
 - b. The moisture content of the material;
 - c. Pollution control device parameters;
 - d. Continuous emission monitor data for all monitored parameters; and
 - e. Results of investigation on the cause(s) of the exceedance and remedial action(s) taken if deemed required.
- 2. The record of the notification shall be retained for a period of not less than three (3) years.
- 3. The Company shall make available upon request by the District Manager, operating data of the Wood Fuel Combustors.

16. SUMMARY REPORTS

- 1. The Company shall prepare, once every two (2) years, a Summary Report to summarize the performance and monitoring requirements of the Wood Fuel Combustors as 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 to be given under Condition 15 during the two-year period.
- c. The dates during the two-year period when Start-up or Shut-down of the Wood Fuel Combustors occurred.
- d. A record of approved fuel management procedures required in Condition 14 and details of instances where these were not followed, if any.
- e. For each pollution control device associated with the Wood Fuel Combustors, 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 under Condition 13 of this Approval.

17. ACOUSTIC AUDIT

- 1. The Company shall carry out Acoustic Audit measurements on the actual noise emissions due to the operation of the Facility. The Company:
 - a. shall carry out Acoustic Audit measurements in accordance with the procedures in Publication NPC-103;
 - shall submit an Acoustic Audit Report on the results of the Acoustic Audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Publication NPC-233, to the District Manager and the Director, not later than December 31, 2034.
- 2. The Director:
 - a. may not accept the results of the Acoustic Audit if the requirements of Publication NPC-233 were not followed;
 - b. may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

18. 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.

19. REVOCATION OF PREVIOUS APPROVALS

1. This Approval replaces and revokes all Certificates of Approval (Air) issued under section 9 EPA and Environmental Compliance Approvals issued under Part II.1 EPA to the Facility in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

SCHEDULE A

Supporting Documentation

- 1. Environmental Compliance Approval Application, dated April 5, 2022, signed by Ashleigh Marchl and submitted by the Company;
- 2. Emission Summary and Dispersion Modelling Report, prepared by RWDI AIR Inc. and dated March 24, 2022; and
- 3. Acoustic Assessment Report, prepared by RWDI AIR Inc., dated November 24, 2023 and signed by Gillian Redman.

SCHEDULE B

Source Testing Procedure

- 1. The Company shall submit, not later than three (3) months after commencement of operation of the Equipment, 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 accepted the Pre-Test Plan.
- 4. The Company shall complete the Source Testing, no later than three (3) months after the Manager has approved the Pre-Test Plan or a date agreed upon in consultation with the District Manager.
- 5. The Company shall notify the Manager, the District Manager and the Director in writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to the Source Testing.
- 6. The Company shall submit a report (electronic format) on the Source Testing to the Manager, the District Manager and the Director not later than three (3) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
 - 1. an executive summary;
 - 2. all records of the operating conditions at the time of Source Testing, including but not limited to the following:
 - a. production data;
 - b. the type of wood being processed;
 - c. the moisture content of the material;
 - d. pollution control device parameters; and
 - e. any applicable additional Facility/ process information related to the operation of the source.
 - 3. all records produced by the Continuous Monitoring System;
 - 4. the results of Source Testing, including the emission rate and emission concentration of the Test Contaminants;

- 5. a tabular comparison of calculated emission rates based on Source Testing results for the Test Contaminants to relevant estimates described in the ESDM Report; and
- 6. results of the calculation of the residence time of the combustion gases and temperature in the combustion chamber of the source.
- 7. The Director may not accept the results of the Source Testing if:
 - 1. the Source Testing Code or the requirements of the Manager were not followed; or
 - 2. the Company did not notify the Manager, the District Manager and the Director of the Source Testing; or
 - 3. 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.
- 9. The Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 and the Procedure Document with the results from the Source Testing if any of the calculated emission factors or calculated emission rates are higher than the predicted rates in the ESDM Report, not later than three (3) months after the submission of the Source Testing report and make these records available for review by staff of the Ministry upon request.

SCHEDULE C

Technical Standards for which the Company is Registered

a. Technical Standards Registry - Air Pollution, in respect of the Pulp and Paper- Industry Standard. Registration number 503-15-393-rv1, dated January 24, 2024

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

1. GENERAL

Condition No. 1 is included to require the Approval holder to build, operate and maintain the Facility in accordance with the Supporting Documentation in Schedule A considered by the Director in issuing this Approval.

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

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

3. DOCUMENTATION REQUIREMENTS

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

4. WRITTEN SUMMARY FORM

Condition No. 6 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.

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 PERFORMANCE

Conditions No. 10, 11, 12, 13, 14, 15, and 16 are included to ensure optimum combustion performance in the Wood Fuel Combustors.

9. ACOUSTIC AUDIT

Condition No. 17 is included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with this Approval can be verified.

10. CHANGE OF OWNERSHIP

Condition No. 18 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.

11. REVOCATION OF PREVIOUS APPROVALS

Condition No. 19 is included to identify that this Approval replaces all Section 9 Certificate(s) of Approval and Part II.1 Approvals in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 2892-ARTN8J issued on January 5, 2018

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	and	Part II.1 of the <i>Environmental Protection Act</i> Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5
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* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

This instrument is subject to Section 38 of the *Environmental Bill of Rights*, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 28th day of February, 2024

Manay Unpara

Nancy E Orpana, P.Eng. Director appointed for the purposes of Part II.1 of the *Environmental Protection Act*

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SM/

c: District Manager, MECP Thunder Bay - District Karri Legarrie, RWDI AIR Inc.