

AMENDED ENVIRONMENTAL COMPLIANCE APPROVALNUMBER 4326-BB4L7A
Issue Date: September 16, 2019AV Terrace Bay Inc.
21 Mill Rd
Terrace Bay, Ontario
P0T 2W0Site Location: 21 Mill Road
21 Mill Rd
Terrace Bay Township, District of Thunder Bay
P0T 2W0

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 bleached kraft pulp manufacturing facility, registered on the *Technical Standards Registry* consisting of the following processes and support units:

- Kraft Pulp Cycle, including:
 - R8 Plant;
 - Bleach Plant;
 - Brown Stock Washers;
 - Pulp Dryer;
- Kraft Liquor Cycle, including:
 - Black Liquor Tanks;
 - Foam and Spills Tanks;
 - Slaker;
 - Causticizer;

- Recovery Boilers;
- Non-Condensable Gas Incineration System;
- Dilute Non-Combustible Gas System;
- Wood and Chip Handling;
- One (1) power boiler (No. 4 Power Boiler) with a maximum heat input of 637,045 megajoules per hour, firing a combination of oil, *Clean Wood Based Fuels* at a maximum rate of 35 oven dry tonnes per hour and *WDF* at a maximum rate of 7.6 litres per minute, equipped with one (1) forced draft electrostatic precipitator consisting of three (3) parallel chambers each operating with three (3) energized fields with a total active collection area of 8405 square metres at 178 degrees Celsius and a retention time of 9.23 seconds, exhausting into the atmosphere at a volumetric flow rate of 138.8 cubic metres per second, having an exit diameter of 2.90 metres, extending 39.6 metres above grade;

including the *Equipment* and any other ancillary and support processes and activities, operating at a *Facility Production Limit* of up to **1230 air dried metric tonnes of pulp per day** discharging to the air as described in the *Original ESDM Report* and the application for registration on the *Technical Standards Registry*, including all notifications to the *Ministry* after the registration on the *Technical Standards Registry* was granted to the *Facility*.

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. "*Air Quality Monitoring Manual* " means the *Ministry* publication entitled "Operations Manual for Air Quality Monitoring in Ontario, dated March 2008", as amended from time to time.
4. "*Approval*" means this entire Environmental Compliance Approval and any *Schedules* to it;

5. "*ASTM* " means American Society for Testing and Materials;
6. "*Batch* " means a quantity of *WDF* contained in a *WDF* storage tank at the time the *WDF* storage tank is sampled and a *Seal* is applied to the *WDF* storage tank;
7. "*Basic Comprehensive User Guide*" means the *Ministry* document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
8. "*Best Management Practices Plan* " means a document or a set of documents which describe measures to minimize dust emissions from the *Facility* and/or *Equipment* .
9. "*Clean Wood Based Fuels* " means wood based fuels that are not derived from particle board, laminated board, wood coated with paint or other coatings, salt laden wood, wood treated with preservatives or stain prevention agents.
10. "*Company*" means AV Terrace Bay Inc. operating as AV Terrace Bay Inc. that is responsible for the construction or operation of the *Facility* and includes any successors and assigns in accordance with section 19 of the *EPA*;
11. "*Compound of Concern*" means a contaminant 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;
12. "*Continuous Monitoring Plan*" means a document that describes the *Continuous Monitoring System* that the *Company* will use for continuous monitoring;
13. "*Continuous Monitoring System*" means the continuous monitoring equipment, data acquisition system and associated operating, maintenance, verification and auditing procedures described in the *Continuous Monitoring Plan* ;
14. "*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*;
15. "*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*;
16. "*District Manager*" means the District Manager of the appropriate local district office of the *Ministry*, where the *Facility* is geographically located;
17. "*Emission Summary Table*" means a table described in paragraph 14 of subsection 26 (1) of *O. Reg. 419/05*;

18. "*Environmental Assessment Act*" means the Environmental Assessment Act, R.S.O. 1990, c.E.18, as amended;
19. "*EPA*" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
20. "*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;
21. "*Equipment with Specific Operational Limits*" means No. 4 Power Boiler and any *Equipment* related to the thermal oxidation or combustion 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*;
22. "*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*;
23. "*Facility*" means the entire operation located on the property where the *Equipment* is located;
24. "*Facility Production Limit*" means the production limit placed by the *Director* on the main product(s) or raw materials used by the *Facility*;
25. "*Fuel Management Plan*" means a document or a set of documents prepared by the *Company* to provide written instructions to staff of the *Company*.
26. "*Log*" means a document that contains a record of each change that is required to be made to the *ESDM Report*, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a *Point of Impingement* and all changes to information associated with a *Modification* to the *Facility* that satisfies Condition 2;
27. "*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*;
28. "*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;
29. "*Ministry*" means the ministry of the *Minister*;

30. "*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*;
31. "*Noise Screening Documents*" means the completed *Primary Noise Screening Form* with supporting information and documentation, or the *Secondary Noise Screening Report*;
32. "*O. Reg. 419/05*" means Ontario Regulation 419/05, Air Pollution – Local Air Quality, as amended;
33. "*Original ESDM Report*" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of *O. Reg. 419/05* and the *Procedure Document* by RWDI AIR Inc. and dated December 12, 2018 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this *Approval*;
34. "*Point of Impingement*" has the same meaning as in section 2 of *O. Reg. 419/05*;
35. "*Pre-Test Plan*" means a plan for the *Source Testing* including the information required in Section 5 of the *Source Testing Code*;
36. "*Primary Noise Screening Form*" means the Ministry Noise Screening Process Form as found in "Noise Screening Process For S.9 Applications – Supplement to Application for Approval" February, 2005, as amended;
37. "*Procedure Document*" means *Ministry* guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated February 2017, as amended;
38. "*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*;
39. "*Publication NPC-207*" means the *Ministry* draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the *Ministry*, August 1978, as amended;
40. "*Publication NPC-300*" means the *Ministry* Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", August 2013, as amended;
41. "*Regulation 347*" means Ontario Regulation 347 R.R.O. 1990;

42. "*Schedules*" means the following schedules attached to this *Approval* and forming part of this *Approval* namely:
- Schedule A - Supporting Documentation
 - Schedule B - *Technical Standards* for which the *Company* is registered; and
 - Schedule C - Source Testing Procedure.
43. "*Secondary Noise Screening Process*" means the *Ministry* draft publication "Secondary Noise Screening Process for S.9 Applications – Supplement to Application for Approval", October 13, 2010, as amended;
44. "*Secondary Noise Screening Report*" means the report, prepared in accordance with the *Secondary Noise Screening Process* submitted in support of the application, that documents all sources of noise emissions present at the *Facility*, as updated in accordance with Condition 5 of this *Approval*;
45. "*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.
46. "*Source Testing*" means sampling and testing to measure emissions resulting from operating the equipment at a level of maximum production within the approved operating range of the equipment.
47. "*Source Testing Code*" means the Ontario Source Testing Code, dated June 2010, prepared by the *Ministry*, as amended.
48. "*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.
49. "*Technical Standard*" has the same meaning as in section 1 of *O. Reg. 419/05*;
50. "*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*;
51. "*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;
52. "*WDF*" means waste-derived fuel as defined in *Regulation 347* ;
53. "*WDF Bulk Storage Tanks*" means the storage tanks, and associated valves, when operated as a bulk reservoir for *WDF* generated on-site only;

54. "*WDF Supply Tank* " means the storage tanks, and associated valves, containing *WDF* only, that has been sampled and equipped with a *Seal* , when it is operated as the sole supply of *WDF* to the No. 4 Power Boiler; and
55. "*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.

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 - *Technical Standards* for which the *Company* is registered; and
 - Schedule C - 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; or

- b. *Modifications* to the *Facility* that would be subject to the *Environmental Assessment Act*.
3. Condition 2.1 of this *Approval* shall expire on July 1, 2023 , 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* that describes the *Facility* as of the date of the renewal application.

3. REQUIREMENT TO REQUEST AN *ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION*

1. Prior to making a *Modification* to the *Facility* that satisfies Condition 2.1.a and 2.1.b, the *Company* shall prepare a proposed update to the *ESDM Report* to reflect the proposed *Modification*.
2. The *Company* shall request approval of an *Acceptable Point of Impingement Concentration* for a *Compound of Concern* if the *Compound of Concern* is not identified in the *ACB list* as belonging to the category “Benchmark 1” and a proposed update to an *ESDM Report* indicates that one of the following changes with respect to the concentration of the *Compound of Concern* may occur:
- a. The *Compound of Concern* was not a *Compound of Concern* in the previous version of the *ESDM Report* and
- i. the concentration of the *Compound of Concern* exceeds the concentration set out for the contaminant in the *ACB list*; or
- ii. the *Compound of Concern* is not identified in the *ACB list*; or
- b. The concentration of the *Compound of Concern* in the updated *ESDM Report* exceeds the higher of,
- i. the most recent *Acceptable Point of Impingement Concentration*, and
- ii. the concentration set out for the contaminant in the *ACB list*, if the contaminant is identified in that document.
3. The request required by Condition 3.2 shall propose a concentration for the *Compound of Concern* and shall contain an assessment, performed by a *Toxicologist*, of the likelihood of the proposed concentration causing an adverse effect at *Points of Impingement*.
4. If the request required by Condition 3.2 is a result of a proposed *Modification* described in Condition 3.1, the *Company* shall submit the request, in writing, to the *Director* at least 30 days prior to commencing to make the *Modification*. The *Director* shall provide written confirmation of receipt of this request to the *Company*.
5. If a request is required to be made under Condition 3.2 in respect of a proposed *Modification* described in Condition 3.1, the *Company* shall not make the *Modification* mentioned in Condition 3.1 unless the request is approved in writing by the *Director*.

6. If the *Director* notifies the *Company* in writing that the *Director* does not approve the request, the *Company* shall,
 - a. revise and resubmit the request; or
 - b. notify the *Director* that it will not be making the *Modification*.
7. The re-submission mentioned in Condition 3.6 shall be deemed a new submission under Condition 3.2.
8. If the *Director* approves the request, the *Company* shall update the *ESDM Report* to reflect the *Modification*.
9. Condition 3 does not apply if Condition 2.1 has expired.

4. PERFORMANCE LIMITS

1. Subject to Condition 4.2, the *Company* shall not discharge or cause or permit the discharge of a *Compound of Concern* into the air if,
 - a. the *Compound of Concern* is identified in the *ACB list* as belonging to the category “Benchmark 1” and the discharge results in the concentration at a *Point of Impingement* exceeding the Benchmark 1 concentration; or
 - b. the *Compound of Concern* is not identified in the *ACB list* as belonging to the category “Benchmark 1” and the discharge results in the concentration at a *Point of Impingement* exceeding the higher of,
 - i. if an *Acceptable Point of Impingement Concentration* exists, the most recent *Acceptable Point of Impingement Concentration*, and
 - ii. the concentration set out for the contaminant in the *ACB list*, if the contaminant is identified in that document.
2. Condition 4.1 does not apply if the benchmark set out in the *ACB list* has a 10-minute averaging period and no ambient monitor indicates an exceedance at a *Point of Impingement* where human activities regularly occur at a time when those activities regularly occur.
3. The *Company* shall, at all times, ensure that the noise emissions from the *Facility* comply with the limits set out in *Ministry Publication NPC-300* .
4. The *Company* shall, at all times, ensure that the vibration emissions from the *Facility* comply with the limits set out in *Ministry Publication NPC-207*.

5. The *Company* shall operate any *Equipment with Specific Operational Limits* approved by this *Approval* in accordance with the *Original ESDM Report* and Conditions 12 thru 18 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 *ESDM Report* in accordance with section 26 of *O. Reg. 419/05* and shall update the *Noise Screening Documents* 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*), the *Noise Screening Documents* and a list of contaminants registered by the *Company* on the *Technical Standards Registry*, 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 *Noise Screening Documents* 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* and *District Manager* 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*.
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. 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.

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 one (1) week 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. supporting information used in the emission rate calculations performed in the *ESDM Reports*;
 - c. the records in the *Log*;
 - d. copies of each *Written Summary Form* provided to the *Ministry* under Condition 6.1 of this *Approval*;
 - e. records of maintenance, repair and inspection of *Equipment* related to all *Processes with Significant Environmental Aspects*; and
 - f. all records related to environmental complaints made by the public as required by Condition 8 of this *Approval*.

10. 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*.

11. FUGITIVE DUST CONTROL

1. The *Company* shall prepare, not later than three (3) months after the date of this *Approval*, and implement a *Best Management Practices Plan* for the control of fugitive dust emissions. This *Best Management Practices Plan* shall include, but not be limited to:
 - a. identification of the main sources of fugitive dust emissions such as:
 - i. on-site traffic;
 - ii. paved roads/areas;

- iii. unpaved roads/areas;
 - iv. material stock piles;
 - v. loading/unloading areas and loading/unloading techniques;
 - vi. material spills;
 - vii. material conveyance systems;
 - viii. exposed openings in process and storage buildings; and
 - ix. general work areas;
- b. potential causes for high dust emissions and opacity resulting from these sources;
 - c. preventative and control measures in place or under development to minimize the likelihood of high dust emissions and opacity from the sources of fugitive dust emissions identified above. Details of the preventative and control measures shall include:
 - i. a description of the control equipment;
 - ii. a description of the preventative procedures to be implemented; and/or
 - iii. the frequency of occurrence of periodic preventative activities, including material application rates, as applicable;
 - d. an implementation schedule for the *Best Management Practices Plan* , including training of plant personnel; and
 - e. inspection and maintenance procedures and monitoring initiatives to ensure effective implementation of the preventative and control measures.

12. PERFORMANCE

- 1. The *Company* shall ensure that No. 4 Power Boiler is 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 No. 4 Power Boiler 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 No. 4 Power Boiler 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 No. 4 Power Boiler is not greater than 800 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 until June 30, 2021, and 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, there after.
2. The *Company* shall take reasonable steps to ensure that the operation of No. 4 Power Boiler meets the following targets:
 - a. The temperature in the combustion chamber of No. 4 Power Boiler , as recorded by the continuous temperature monitoring system required by this *Approval* , is at least 1000 degrees Celsius, and
 - b. The residence time, of the products of combustion and the combustion air, in the combustion chamber of No. 4 Power Boiler is not less than one (1) second.
3. Requirements in Sections 12.1 (a), 12.1 (b), 12.1 (c), 12.2 (a) and 12.2. (b) do not apply during the following periods:
 - a. The *Start-up* and *Shut-down* periods of No. 4 Power Boiler 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 No. 4 Power Boiler.

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 No. 4 Power Boiler 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 timeframe 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 No. 4 Power Boiler. 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 *No. 4 Power Boiler*.

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 *No. 4 Power Boiler* 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 *No. 4 Power Boiler* 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 *No. 4 Power Boiler*, 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. SOURCE TESTING

1. The *Company* shall, within twelve (12) months of the date of the *Approval* , perform *Source Testing* , following the Source Testing Procedure outlined in Schedule C, to determine the Opacity from No. 4 Power Boiler.
2. 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 C, to determine the emission rate of Total Suspended Particulate Matter and Benzo(a)pyrene from the No. 4 Power Boiler.

18. CONTINUOUS MONITORING

1. The *Company* shall submit, to the *Manager* , not later than sixty (60) days from the date of this *Approval* , a *Continuous Monitoring Plan* for the *Continuous Monitoring System* that will continuously monitor:
 - a. the concentration of oxygen and carbon monoxide in the undiluted flue gas emitted from the combustion chamber of the No. 4 Power Boiler;
 - b. the opacity of the gases leaving No.4 Power Boiler;
 - c. the temperature of the hot combustion gases in the No. 4 Power Boiler; and
 - d. the verification method for demonstrating the temperature and residence time requirements for the No. 4 Power Boiler.
2. The *Continuous Monitoring Plan* shall include descriptions of, but not be limited to:
 - a. source and air pollutants / parameters requiring continuous monitoring and associated targets / in-stack limits,
 - b. sample probe and gas calibration port location(s) and associated flue gas conditions,
 - c. sample extraction, transport and conditioning system,
 - d. analyzer performance specifications,
 - e. relative accuracy and reference method for test audit,
 - f. performance indicators and monitoring frequency,
 - g. communication protocol(s) and corrective action(s) regarding malfunctions,

- h. preventative maintenance and spare parts,
 - i. service contractor and staff responsibilities including training,
 - j. other operating and maintenance procedures as applicable,
 - k. data acquisition system, and
 - l. data verification procedures.
3. The *Company* shall finalize the *Continuous Monitoring Plan* in consultation with the *Manager* .
 4. The *Company* shall procure, install, operate and maintain the *Continuous Monitoring System* not later than six (6) months after the *Manager* has approved the *Continuous Monitoring Plan* . A current copy of the *Continuous Monitoring Plan* shall be kept at an accessible location for easy access by persons responsible for supervising, operating and maintaining the *Continuous Monitoring System* and associated data as well as by a Ministry representative, upon request.
 5. 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 No. 4 Power Boiler and record the values of these parameters on hourly basis or some other time period which is acceptable to the *District Manager* ;
 6. The *Company* shall measure and record the type and feed rates of fuel to the No. 4 Power Boiler on a daily basis and retain these records for a minimum of three (3) years.

19. WASTE DERIVED FUEL

1. The *Company* shall not burn any contents of any *WDF* storage tank that has not been sampled, analysed and demonstrated to meet *WDF* criteria as defined in *Regulation 347* , in accordance with Conditions 19.2 to 19.6.
2. The *Company* shall direct *WDF* generated continuously or periodically as a result of regular on-site operations to one (1) *WDF Bulk Storage Tank* . The *WDF* storage tank receiving *WDF* at any time shall be labelled as "*WDF Bulk Storage Tank* ".
3. The *Company* shall analyse a Representative Sample of the *Batch* of *WDF* stored in the *WDF Bulk Storage Tank* that represents the composition of the contents of the *WDF Bulk Storage Tank* . The sample shall be taken in accordance with *Regulation 347* ; “Industrial Waste Sampling Procedures Manual, 1989, PIBS Number 339” prepared by the Waste Management Branch of the Ministry; and the “Guide to the Collection and submission of Samples for Laboratory Analysis, 1989” prepared by the Laboratory Services Branch of the Ministry. The sample shall be one (1) vertical profile sample or one (1) composite sample of a mix of equal volume of grab samples taken from a minimum of three different vertical locations (bottom, middle and top).

4. The *Company* shall apply a *Seal* to the *WDF Bulk Storage Tank* immediately after a sample of the *Batch* of *WDF* has been taken for analysis. The unique identifier of each *Seal* applied to the *WDF Bulk Storage Tank* must correspond to the analysis of the *Batch* of *WDF* from which the representative sample was taken.
5. The *Company* shall submit the Representative Sample for analysis to an accredited laboratory. All analysis procedures shall be based on *ASTM* methods that have a minimum detection limit of 50 percent or less of the specified value (excluding flash point). The analysis shall be conducted to determine whether the representative sample meets the requirements of *WDF* as required by *Regulation 347* .
6. The *Company* shall demonstrate that the Representative Sample meets the requirements of *WDF* as required by *Regulation 347* , prior to directing *WDF* to the No.4 Power Boiler. The *WDF Bulk Storage Tank* equipped with a *Seal* , containing the *Batch* of *WDF* which has been demonstrated to meet the criteria of *WDF* as required by *Regulation 347* shall be operated and labelled as "*WDF Supply Tank* " .
7. The *Company* shall direct additional volume of *WDF* to the *WDF Bulk Storage Tank* only. Breaking of a *Seal* applied to the *WDF Supply Tank* , constitutes a new *Batch* of *WDF* . The *Company* shall repeat Conditions 19.2 through 19.6 upon breaking a *Seal* .
8. The *Company* shall ensure that all *WDF* shall be stored in accordance with Ministry publication "Guidelines for Environmental Protection Measures at Chemical Storage Facilities, dated October 1978". *WDF* shall be segregated from other incompatible wastes and materials.
9. The *Company* shall dispose of all waste material collected for use as *WDF* which does not meet *WDF* criteria in *Regulation 347* by a *Ministry* approved waste hauler.
10. The *Company* shall record in writing the volumes of any waste materials collected for use as *WDF* , disposed of by a *Ministry* approved waste hauler, as well as the corresponding laboratory analysis and *Seal* applied to the *WDF Bulk Storage Tank* for the *Batch* of waste materials which did not meet *WDF* criteria as required by *Regulation 347* .
11. The *Company* shall monitor and record in writing the following information related to the samples of *WDF* taken from the *WDF Bulk Storage Tank* pursuant to the sampling and analysis requirements set out in Conditions 19.2 to 19.6 of this *Approval* :
 - a. Volume of the *WDF Bulk Storage Tank* ;
 - b. Date of Representative Sample taken and date submitted for laboratory analysis;
 - c. Date and unique identifier of the *Seal* applied to the *WDF Bulk Storage Tank* , and the laboratory analysis for the corresponding *Batch* of *WDF* ;
 - d. Comparison of the analytical results of the Representative Sample to the requirements of *WDF* as required by *Regulation 347* ; and

- e. A log indicating the quantity of *WDF* burned between each date of sampling and/or maintenance, repair or inspection of the No.4 Power Boiler.
12. The *Company* shall monitor and record in writing the quantity of *WDF* burned by the No.4 Power Boiler by:
 - a. Connecting an elapsed-time metre on the *Equipment* circuit that will indicate the total time that the No.4 Power Boiler is in operation and by multiplying the elapsed time by the design average fuel consumption rate for the No.4 Power Boiler, or
 - b. Connecting a volumetric flow metre on the No.4 Power Boiler circuit that will indicate the volume of *WDF* burned in the No.4 Power Boiler, or
 - c. By using an alternate procedure that the *Company* proposes and the *District Manager* authorizes in writing.

20. MONITORING

1. The *Company* shall monitor and report emissions of total reduced sulphur 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 at locations acceptable to and approved in writing by the *District Manager* :
 - b. Ambient air monitoring stations shall be located, operated and maintained in accordance with the *Air Quality Monitoring Manual*;
 - c. Emissions of total reduced sulphur and meteorological data of wind speed/velocity, as noted in Condition 20.1.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 total reduced sulphur 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* .

SCHEDULE A

Supporting Documentation

1. Environmental Compliance Approval Application, dated November 8, 2018, signed by Bill Murphy and submitted by the *Company*;
2. Emission Summary and Dispersion Modelling Report, prepared by RWDI AIR Inc. and dated December 12, 2018

SCHEDULE B

Technical Standards for which the Company is Registered

1. Technical Standards Registry - Air Pollution, in respect of the Pulp and Paper- Industry Standard. Registration number 505-15-393-rv0, dated February 27, 2015.

SCHEDULE C

Source Testing Procedures

1. The *Company* shall submit, not later than three (3) months prior to the *Source Testing* , to the *Manager* a *Pre-Test Plan* for the *Source Testing* required under this *Approval*. The *Company* shall finalize the *Pre-Test Plan* in consultation with the *Manager*.
2. The *Company* shall not commence the *Source Testing* required under this *Approval* until the *Manager* has approved the *Pre-Test Plan*.
3. The *Company* shall complete the *Source Testing* not later than three (3) months after the *Manager* has approved the *Pre-Test Plan* .
4. The *Company* shall notify the *Manager* , the *District Manager* and the *Director* in writing of the location, date and time of any impending *Source Testing* required by this *Approval* , at least fifteen (15) days prior to the *Source Testing*.
5. The *Company* shall submit a report (hardcopy and electronic format) on the *Source Testing* to the *Manager* , the *District Manager* and the *Director* not later than three (3) months after completing the *Source Testing* . The report shall be in the format described in the *Source Testing Code* , and shall also include, but not be limited to:
 - a. an executive summary;
 - b. an identification of the applicable North American Industry Classification System code (NAICS) for the *Facility*;
 - c. records of operating conditions at the time of *Source Testing* , including but not limited to the following:
 - i. production data and equipment operating rate as a percentage of maximum capacity;
 - ii. *Facility* /process information related to the operation of the No. 4 Power Boiler;
 - d. results of *Source Testing*, including the emission rate, emission concentration, and relevant emission factor of the *Test Contaminants* from the No. 4 Power Boiler; and

- e. a tabular comparison of calculated emission rates and emission factors based on *Source Testing* results for the No. 4 Power Boiler and *Test Contaminants* to original emission estimates described in the *Company's* application and the *ESDM Report*.
6. The *Director* may not accept the results of the *Source Testing* if:
 - a. the *Source Testing Code* or the requirements of the *Manager* were not followed;
 - b. the *Company* did not notify the *Manager*, the *District Manager* and *Director* of the *Source Testing*; or
 - c. the *Company* failed to provide a complete report on the *Source Testing*.
 7. If the *Director* does not accept the results of the *Source Testing*, the *Director* may require re-testing. If re-testing is required, the *Pre-Test Plan* strategies need to be revised and submitted to the *Manager* for approval. The actions taken to minimize the possibility of the *Source Testing* results not being accepted by the *Director* must be noted in the revision.
 8. If the *Source Testing* results are higher than the emission estimates in the *Company's* *ESDM Report*, the *Company* shall update their *ESDM Report* in accordance with Section 26 of *O. Reg. 419/05* with the results from the *Source Testing* report and make these records available for review by staff of the *Ministry* upon request. The updated Emission Summary Table from the updated *ESDM Report* shall be submitted with the report on the *Source Testing*.

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 up to date *Noise Screening Documents* and an up to date *ESDM Report* that describes the *Facility* at all times and make the *Emission Summary Table* from that report, along with a list of contaminants registered by the *Company* on the *Technical Standards Registry* and the *Noise Screening Documents* 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. REVOCATION OF PREVIOUS APPROVALS

Condition No. 10 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*.

9. FUGITIVE DUST CONTROL

Condition No.11 is included to emphasize that the *Equipment* must be maintained and operated according to a procedure that will result in compliance with the *EPA*, the Regulations and this *Approval*.

10. EQUIPMENT PERFORMANCE

Conditions No. 12, 13, 14, 15, 16, 17 and 18 are included to ensure optimum combustion performance in the No. 4 Power Boiler.

11. WASTE DERIVED FUEL

Condition No. 19 is included to outline the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the No. 4 Power Boiler and to require the *Company* to gather accurate information so that the environmental impact and subsequent compliance with the *EPA*, the Regulations and this Approval can be verified.

12. MONITORING

Condition No. 20 is included to also monitor the contaminant emissions to ensure that no adverse effect will occur in daily operation of the *Facility*.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 6510-9SLU6B issued on January 27, 2015

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 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 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
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

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

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the 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 www.ert.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 www.ebr.gov.on.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 16th day of September, 2019



Christina Labarge, P.Eng.

Director

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

SM/

c: District Manager, MECP Thunder Bay - District
Brad Bergeron, RWDI Air Inc.