

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 2130-BG3J4J

Issue Date: October 8, 2019

Nipigon LNG Corporation
150 Connie Cres, No. 4
Concord, Ontario
L4K 1L9

Site Location: Nipigon Natural Gas Liquefaction Plant
Lot 12, Concession 4
Ledger Unorganized Township, District of Thunder Bay

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 natural gas liquefaction facility, consisting of the following processes and support units:

- feed gas analysis;
- natural gas pre-treatment operations;
- liquefaction and storage operations;
- liquified natural gas analysis;
- natural gas flaring; and
- electricity generation with a natural gas-fired turbine;

including the *Equipment* and any other ancillary and support processes and activities, operating at a *Facility Production Limit* of up to **10,000 Gigajoules liquefied natural gas per day** discharging to the air as described in the *Original ESDM Report*.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "*ACB list*" means the document entitled "Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", as amended from time to time

and published by the *Ministry* and available on a Government website;

2. "*Acceptable Point of Impingement Concentration*" means a concentration accepted by the *Ministry* as not likely to cause an adverse effect for a *Compound of Concern* that,
 - a. is not identified in the *ACB list*, or
 - b. is identified in the *ACB list* as belonging to the category "Benchmark 2" and has a concentration at a *Point of Impingement* that exceeds the concentration set out for the contaminant in that document.With respect to the *Original ESDM Report*, the *Acceptable Point of Impingement Concentration* for a *Compound of Concern* mentioned above is the concentration set out in the *Original ESDM Report*;
3. "*Approval*" means this entire Environmental Compliance Approval and any *Schedules* to it;
4. "*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*;
5. "*Company*" means Nipigon LNG Corporation 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*;
6. "*Compound of Concern*" means a contaminant described in paragraph 4 subsection 26 (1) of *O. Reg. 419/05*, namely, a contaminant that is discharged from the *Facility* in an amount that is not negligible;
7. "*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*;
8. "*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*;
9. "*District Manager*" means the District Manager of the appropriate local district office of the *Ministry*, where the *Facility* is geographically located;
10. "*Emission Summary Table*" means a table described in paragraph 14 of subsection 26 (1) of *O. Reg. 419/05*;
11. "*Environmental Assessment Act*" means the Environmental Assessment Act, R.S.O. 1990, c.E.18, as amended;
12. "*EPA*" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
13. "*Equipment*" means equipment or processes described in the *ESDM Report*, this

Approval and in the *Schedules* referred to herein and any other equipment or processes;

14. "*Equipment with Specific Operational Limits*" means the natural gas-fired turbine and any *Equipment* related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other *Equipment* that is specifically referenced in any published *Ministry* document that outlines specific operational guidance that must be considered by the *Director* in issuing an *Approval*;
15. "*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*;
16. "*Facility*" means the entire operation located on the property where the *Equipment* is located;
17. "*Facility Production Limit*" means the production limit placed by the *Director* on the main product(s) or raw materials used by the *Facility*;
18. "*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;
19. "*Lower Heating Value*" means the energy released during combustion of the fuel, excluding the latent heat content of the water vapour component of the products of combustion, expressed in megajoules per cubic metre at standard temperature and pressure, or megajoules per kilogram;
20. "*Manager*" means the Manager, Technology Standards Section, Technical assessment and Standards Development Branch, of the *Ministry*, or any other person who represents and carries out the duties of the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch of the *Ministry*, as those duties relate to the conditions of this *Approval*;
21. "*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;
22. "*Ministry*" means the ministry of the *Minister*;
23. "*Modification*" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the *Facility* that may discharge or alter the rate or

manner of discharge of a *Compound of Concern* to the air or discharge or alter noise or vibration emissions from the *Facility*;

24. "*Noise Screening Documents*" means the completed *Primary Noise Screening Method*;
25. "*O. Reg. 419/05*" means Ontario Regulation 419/05, Air Pollution – Local Air Quality, as amended;
26. "*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 Mike Stachejczuk / Stantec Consulting Ltd. and dated September 12, 2019 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this *Approval*;
27. "*Point of Impingement*" has the same meaning as in section 2 of *O. Reg. 419/05*;
28. "*Power Output*" means the electricity and shaft power production of the combustion turbine, expressed in megawatts;
29. "*Pre-Test Plan*" means a plan for the *Source Testing* including the information required in Section 5 of the *Source Testing Code*;
30. "*Primary Noise Screening Method*" means the *Ministry* Primary Noise Screening Method form as described in the "Primary Noise Screening Method Guide", January 31, 2017, as amended;
31. "*Procedure Document*" means *Ministry* guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated February 2017, as amended;
32. "*Processes with Significant Environmental Aspects*" means the *Equipment* which, during regular operation, would discharge one or more contaminants into the air in an amount which is not considered as negligible in accordance with section 26 (1) 4 of *O. Reg. 419/05* and the *Procedure Document*;
33. "*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;
34. "*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;
35. "*Schedules*" means the following schedules attached to this *Approval* and forming part of this *Approval* namely:
 - Schedule A - Supporting Documentation

- Schedule B - Emission Limits
- Schedule C - Source Testing Procedures
- Schedule D - Thermal Efficiency Verification

36. "*Source Testing*" means sampling and testing to measure emissions resulting from operating the *Targeted Sources* under conditions which yield the worst case emissions within the approved operating range of the *Targeted Sources* which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
37. "*Source Testing Code*" means the Ontario Source Testing Code, dated June 2010, prepared by the *Ministry*, as amended;
38. "*Thermal Efficiency*" means the fraction of the total energy input into the *Turbine* which is transformed into useful energy output expressed as a percentage on a lower heating value basis.
39. "*Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources*" means the *Ministry* publication "Technical Bulletin: management approaches for industrial fugitive dust sources", March 8, 2017, as amended;
40. "*Test Contaminant*" means Nitrogen Oxides (expressed as nitrogen dioxide equivalent);
41. "*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;
42. "*Turbine*" means the 5 MW turbine described in the *Company's* application, this *Approval* and in the supporting documentation submitted with the application, to the extent approved by this *Approval*; and
43. "*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 - Emission Limits
- Schedule C - Source Testing Procedures
- Schedule D - Thermal Efficiency Verification

2. LIMITED OPERATIONAL FLEXIBILITY

1. Pursuant to section 20.6 (1) of the *EPA* and subject to Conditions 2.2 and 2.3 of this *Approval*, future construction, alterations, extensions or replacements are approved in this *Approval* if the future construction, alterations, extensions or replacements are *Modifications* to the *Facility* that:
 - a. are within the scope of the operations of the *Facility* as described in the *Description Section* of this *Approval*;
 - b. do not result in an increase of the *Facility Production Limit* above the level specified in the *Description Section* of this *Approval*; and
 - c. result in compliance with the performance limits as specified in Condition 4.
2. Condition 2.1 does not apply to,
 - a. the addition of any new *Equipment with Specific Operational Limits* or to the *Modification* of any existing *Equipment with Specific Operational Limits* at the *Facility*; or
 - b. *Modifications* to the *Facility* that would be subject to the *Environmental Assessment Act*.
3. Condition 2.1 of this *Approval* shall expire ten (10) years from the date of this *Approval*, unless this *Approval* is revoked prior to the expiry date. The *Company* may apply for renewal of Condition 2.1 of this *Approval* by including an *ESDM Report* 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 4.6 and 10 in this *Approval*.
6. The *Company* shall ensure that the *Turbine* is designed and operated to comply, at all times, with the following performance requirements:
 - a. the concentrations of Nitrogen Oxides, Carbon Monoxide and Sulphur Dioxide in the undiluted flue gas leaving the turbine compressor exhaust stack is not greater than the limits specified in Schedule B of this *Approval*; and
 - b. the *Thermal Efficiency* of the *Turbine* is not less than the *Thermal Efficiency* specified in Schedule B of this *Approval*.

5. DOCUMENTATION REQUIREMENTS

1. The *Company* shall maintain an up-to-date *Log*.
2. No later than June 30 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*) and the *Noise Screening Documents* 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* no later than August 31 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, before commencement of operation of the *Equipment*, operating procedures and maintenance programs for all *Processes with Significant Environmental Aspects*, which shall specify as a minimum:
 - a. frequency of inspections and scheduled preventative maintenance;
 - b. procedures to prevent upset conditions;
 - c. procedures to minimize all fugitive emissions;
 - d. procedures to prevent and/or minimize odorous emissions;
 - e. procedures to prevent and/or minimize noise emissions; and
 - f. procedures for record keeping activities relating to the operation and maintenance programs.
2. The *Company* shall ensure that all *Processes with Significant Environmental*

Aspects are operated and maintained in accordance with this *Approval*, the operating procedures and maintenance programs.

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.

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. all documentation prepared in accordance with Condition 10 of this *Approval*;

- e. copies of each *Written Summary Form* provided to the *Ministry* under Condition 6.1 of this *Approval*;
- f. records of maintenance, repair and inspection of *Equipment* related to all *Processes with Significant Environmental Aspects*; and
- g. all records related to environmental complaints made by the public as required by Condition 8 of this *Approval*.

10. SOURCE TESTING

1. The *Company* shall perform *Source Testing*, in accordance with the procedures in Schedule C of this *Approval* to determine the rate of the *Test Contaminant* from the *Turbine*.
2. The *Company* shall perform a test in conjunction with the above *Source Testing*, in accordance with the procedures outlined in Schedule D, to determine the *Thermal Efficiency* of the *Turbine*.

11. FUGITIVE DUST CONTROL

1. The *Company* shall develop in consultation with the *District Manager*, a *Best Management Practices Plan* for the control of fugitive dust emissions. This *Best Management Practices Plan* shall:
 - a. at minimum, be prepared in accordance with *Ministry Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources*; and
 - b. include a list of all *Ministry* comments received, if any, on the development of the *Best Management Practices Plan*, and a description of how each *Ministry* comment was addressed in the *Best Management Practices Plan*.
2. The *Company* shall submit the *Best Management Practices Plan* to the *District Manager* not later than three (3) months after the date of this *Approval* or as otherwise indicated by the *District Manager*.
3. Upon acceptance of the *Best Management Practices Plan* by the *District Manager*, the *Company* shall immediately implement the *Best Management Practices Plan* for the control of fugitive dust emissions to provide effective dust suppression measures to any potential sources of fugitive dust emissions resulting from the operation of the *Facility*.
4. The *Company* shall update the *Best Management Practices Plan* as necessary or at the direction of the *District Manager*.

12. 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 July 2, 2019, signed by Joshua Samuel, President and submitted by the *Company*;
2. Emission Summary and Dispersion Modelling Report, prepared by Mike Stachejczuk / Stantec Consulting Ltd. and dated September 12, 2019;

SCHEDULE B

Emission Limits

PARAMETER	LIMIT
Nitrogen Oxides	42 ppmv ^{1,2}
Carbon Monoxide	60 ppmv ^{1,2}
Sulphur Dioxide	100 ppmv ^{1,2}
Thermal Efficiency	29.6 percent

1. Emissions from the *Turbine* outside of "normal operation" are excluded for the purposes of demonstration of compliance with emission limits. "Normal operation" means the full-load operation of the *Turbine* as defined by the manufacturer.
2. "ppmv" means parts per million by volume at Reference Conditions (ambient temperature at 15 degrees Celsius, 60 percent relative humidity and 101.3 kiloPascals barometric pressure) on a dry volume basis normalized to 15 percent oxygen.

SCHEDULE C

Source Testing Procedures

1. The *Company* shall submit, at least sixty (60) days prior to the scheduled date of 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 commencement of operation of the *Turbine*, as applicable, or three (3) months after the *Manager* has approved the *Pre-Test Plan*, whichever occurs later and every two (2) calendar years thereafter.
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 (hard copy 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. Date, time and duration of each test;
 - d. Records of operating conditions at the time of *Source Testing*;
 - e. Oxygen concentration (percent by volume);
 - f. Stack gas volumetric flowrate (cubic metres per second at reference conditions);
 - g. Stack gas temperature (degrees Celsius);
 - h. Average of emission concentration readings of the *Test Contaminant* (part per million by volume);
 - i. Results of *Source Testing*, including the emission rate, emission concentration, and relevant emission factor of the *Test Contaminant* from the *Turbine*; and
 - j. A tabular comparison of *Source Testing* results for the *Turbine* and *Test Contaminant* 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*.

SCHEDULE D

Thermal Efficiency Verification

PARAMETERS:

1. *Power Output*
2. Heat Output
3. Fuel Flow Rate
4. *Lower Heating Value*
5. Meteorological Parameters:
 - a. ambient air temperature (expressed in degree of Celsius)
 - b. barometric pressure (expressed in kilopascal)
 - c. relative humidity (expressed in percent)
6. Date, time and duration of test.

FORMULA:

(Power Output + Heat Output) x 100%

**Thermal Efficiency = -----
Fuel Flow Rate x *Lower Heating Value***

NOTE:

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

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 ongoing 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 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. SOURCE TESTING

Condition No. 10 is included to gather accurate information so that the environmental impact and subsequent compliance with the *EPA*, the regulations and this *Approval* can be verified.

9. FUGITIVE DUST CONTROL

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

10. REVOCATION OF PREVIOUS APPROVALS

Condition No. 12 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*.

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.

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*		The Minister of the Environment,		The Director appointed for the purposes of
Environmental Review Tribunal		Conservation and Parks		Part II.1 of the Environmental Protection Act
655 Bay Street, Suite 1500	AND	777 Bay Street, 5th Floor	AND	Ministry of the Environment, Conservation
Toronto, Ontario		Toronto, Ontario		and Parks
M5G 1E5		M7A 2J3		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 <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 8th day of October,
2019

Christina Labarge, P.Eng.
Director
appointed for the purposes of Part
II.1 of the *Environmental Protection
Act*

MS/
c: District Manager, MECP Thunder Bay - District
Mike Stachejczuk, Stantec Consulting Ltd.