

## AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 5956-D8CJYL  
Issue Date: March 25, 2025

Ontario Power Generation Inc.  
Post Office Box, No. 7000 B21  
Tiverton, Ontario  
N0G 2T0

Site Location: Western Waste Management Facility  
Lot 19 and 20, Concession 4  
Kincardine Municipality, County of Bruce  
N0G 2T0

*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 radioactive waste storage and processing facility, consisting of one (1) two-stage thermal Incinerator, including the following major components:

- one (1) propane fired primary combustion chamber, having a nominal heat input of 4,571 megajoules per hour, operating from 800 degrees Celsius to 1,220 degrees Celsius;
- one (1) propane / waste oil fired secondary combustion chamber, having a nominal heat input of 2,126 megajoules per hour, operating from 1,000 degrees Celsius to 1,220 degrees Celsius;
- one (1) flue gas treatment system in which slaked lime and activated carbon are injected into the flue gas to neutralize acid gas and adsorb trace organic and heavy metals;
- one (1) baghouse dust collector, having 171 square metres of aramid-felt filter bags, or equivalent, and a pulse jet cleaning mechanism;
- exhausting into the air at a volumetric flow rate up to 2.27 cubic metres per second through a stack, designated as S1, having an exit inside diameter of 0.34 metre, extending 7.3 metres above the roof and 21.0 metres above grade;
- one (1) emergency vent;

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to **2,270 kilograms of Waste incinerated 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. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 and Appendix A of the Basic Comprehensive User Guide, by Cheng Wu Li / Ontario Power Generation and dated November 29, 2024 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility, as updated in accordance with Condition 5 of this Approval;
4. "Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarising the results of the Acoustic Assessment Report, as updated in accordance with Condition 5 of this Approval;
5. "AERMOD" means the dispersion model developed by the American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) including the PRIME (Plume Rise Model Enhancement) algorithm;
6. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
7. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;

8. "Continuous Monitoring Plan" means a plan to continuously monitor and record the operating temperature in the secondary chamber of the Incinerator, the opacity in the flue gas leaving the Incinerator, the concentration of oxygen in the undiluted flue gas leaving the Incinerator, and the concentrations of carbon monoxide, nitrogen oxides, and hydrogen chloride in the flue gas leaving the Incinerator;
9. "Continuous Monitoring System" means the continuous emission monitoring system described in the Continuous Monitoring Plan, consisting of continuous monitors and recording devices;
10. "Company" means **Ontario Power Generation Inc.** operating as **Western Waste Management Facility** 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 described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged from the Facility in an amount that is not negligible;
12. "Description Section" means the section on page one of this Approval describing the Company's operations and the Equipment located at the Facility and specifying the Facility Production Limit for the Facility;
13. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;
14. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
15. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
16. "Environmental Assessment Act" means the *Environmental Assessment Act*, R.S.O. 1990, c.E.18;
17. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
18. "Equipment" means equipment or processes described in the ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
19. "Equipment with Specific Operational Limits" means the Incinerator 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;

20. "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
21. "Facility" means the entire operation located on the property where the Equipment is located;
22. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
23. "Highest Ranking Person" means the highest ranking person regularly present at the Facility who has management responsibilities relating to the Facility;
24. "Incinerator" means the thermal incinerator and associated major components described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval;
25. "Log" means a document that contains a record of each change that is required to be made to the ESDM Report and Acoustic Assessment Report, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a Point of Impingement and all changes to information associated with a Modification to the Facility that satisfies Condition 2;
26. "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;
27. "Minister" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the EPA under the Executive Council Act;
28. "Ministry" means the ministry of the Minister;
29. "Modification" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the Facility that may discharge or alter the rate or manner of discharge of a Compound of Concern to the air or discharge or alter noise or vibration emissions from the Facility;
30. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers;

31. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution – Local Air Quality, made under the EPA;
32. "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 Navin Bindra / Ontario Power Generation Inc., and dated April 30, 2024, submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
33. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
34. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
35. "Pre-test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
36. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
37. "Processes with Significant Environmental Aspects" means the Equipment which, during regular operation, would discharge one or more contaminants into the air in an amount which is not considered as negligible in accordance with section 26 (1) 4 of O. Reg. 419/05 and the Procedure Document;
38. "Publication NPC-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;
39. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, 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. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
  - Schedule A - Supporting Documentation
  - Schedule B - Test Contaminants;
  - Schedule C - Dioxins, Furans and Dioxin-like PCBs (Polychlorinated Biphenyls); and
  - Schedule D - Source Testing Procedure;
42. "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;

43. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
44. "Test Contaminants" means those contaminants set out in Schedule B of this Approval;
45. "Toxicologist" means a qualified professional currently active in the field of risk assessment and toxicology that has a combination of formal university education, training and experience necessary to assess contaminants;
46. "Waste Oil" means the liquid wastes that are part of the feedstocks in Wastes defined below;
47. "Wastes" means the low level radioactive wastes approved under Certificate of Approval (Air) Number 64/1/138 dated January 21, 1976 and the radioactive wastes approved by the Canadian Nuclear Safety Commission under the current Waste Facility Operating Licence Western Waste Management Facility; and
48. "Written Summary Form" means the electronic questionnaire form, available on the Ministry website, that documents whether Modifications were undertaken at the Facility and compliance with the Approval, in the previous calendar year.

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

## **TERMS AND CONDITIONS**

### **1. GENERAL**

1. Except as otherwise provided by this Approval, the Facility shall be designed, developed, built, operated and maintained in accordance with the terms and conditions of this Approval and in accordance with the following Schedules attached hereto:
  - Schedule A - Supporting Documentation
  - Schedule B - Test Contaminants
  - Schedule C - Dioxins, Furans and Dioxin-like PCBs (Polychlorinated Biphenyls)
  - Schedule D - Source Testing Procedure

### **2. OPERATIONAL FLEXIBILITY**

1. Pursuant to section 20.6 (1) of the EPA and subject to Conditions 2.2 and 2.3 of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are Modifications to the Facility that:
  - a. are within the scope of the operations of the Facility as described in the Description Section of this Approval;

- b. do not result in an increase of the Facility Production Limit above the level specified in the Description Section of this Approval; and
  - c. result in compliance with the performance limits as specified in Condition 4.
- 2. Condition 2.1 does not apply to,
  - a. the addition of any new Equipment with Specific Operational Limits or to the Modification of any existing Equipment with Specific Operational Limits at the Facility; and
  - b. Modifications to the Facility that would be subject to the Environmental Assessment Act.
- 3. Condition 2.1 of this Approval shall expire ten (10) years from the date of this Approval, unless this Approval is revoked prior to the expiry date. The Company may apply for renewal of Condition 2.1 of this Approval by including an ESDM Report and an Acoustic Assessment Report that describes the Facility as of the date of the renewal application.

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

- 1. Prior to making a Modification to the Facility that satisfies Condition 2.1.a. and 2.1.b., the Company shall prepare a proposed update to the ESDM Report to reflect the proposed Modification.
- 2. The Company shall request approval of an Acceptable Point of Impingement Concentration for a Compound of Concern if the Compound of Concern is not identified in the ACB list as belonging to the category “Benchmark 1” and a proposed update to an ESDM Report indicates that one of the following changes with respect to the concentration of the Compound of Concern may occur:
  - a. The Compound of Concern was not a Compound of Concern in the previous version of the ESDM Report, and
    - i. the concentration of the Compound of Concern exceeds the concentration set out for the contaminant in the ACB list; or
    - ii. the Compound of Concern is not identified in the ACB list; or
  - b. The concentration of the Compound of Concern in the updated ESDM Report exceeds the higher of,
    - i. the most recent Acceptable Point of Impingement Concentration, and

- ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
3. The request required by Condition 3.2 shall propose a concentration for the Compound of Concern and shall contain an assessment, performed by a Toxicologist, of the likelihood of the proposed concentration causing an adverse effect at Points of Impingement.
4. If the request required by Condition 3.2 is a result of a proposed Modification described in Condition 3.1, the Company shall submit the request, in writing, to the Director at least 30 days prior to commencing to make the Modification. The Director shall provide written confirmation of receipt of this request to the Company.
5. If a request is required to be made under Condition 3.2 in respect of a proposed Modification described in Condition 3.1, the Company shall not make the Modification mentioned in Condition 3.1 unless the request is approved in writing by the Director.
6. If the Director notifies the Company in writing that the Director does not approve the request, the Company shall,
  - a. revise and resubmit the request; or
  - b. notify the Director that it will not be making the Modification.
7. The re-submission mentioned in Condition 3.6 shall be deemed a new submission under Condition 3.2.
8. If the Director approves the request, the Company shall update the ESDM Report to reflect the Modification.
9. Condition 3 does not apply if Condition 2.1 has expired.

#### **4. PERFORMANCE LIMITS**

1. Subject to Condition 4.2, the Company shall not discharge or cause or permit the discharge of a Compound of Concern into the air if,
  - a. the Compound of Concern is identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the Benchmark 1 concentration; or
  - b. the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the higher of,



- i. if an Acceptable Point of Impingement Concentration exists, the most recent Acceptable Point of Impingement Concentration, and
  - ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
2. Condition 4.1 does not apply if the benchmark set out in the ACB list has a 10-minute averaging period and no ambient monitor indicates an exceedance at a Point of Impingement where human activities regularly occur at a time when those activities regularly occur.
3. The Company shall, 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 Condition 4.6 of this Approval.
6. The Company shall ensure that the design and operation of the Incinerator complies with the following limits:
  - a. The concentration of oxygen, as recorded by the Continuous Monitoring System in the undiluted flue gas leaving the Incinerator, shall not be less than 6 percent by dry volume calculated as the rolling arithmetic average of 40 minutes of data, with a time resolution as specified in the Continuous Monitoring Plan.
  - b. The concentration of carbon monoxide, as recorded by the Continuous Monitoring System in the flue gas leaving the Incinerator stack, shall not exceed 25 parts per million by dry volume calculated as the rolling arithmetic average of 4 hours of data, with a time resolution as specified in the Continuous Monitoring Plan.
  - c. The concentration of total hydrocarbons, having a carbon content expressed as equivalent methane, being the rolling arithmetic average of 10 measurements taken at approximately 1 minute intervals, in the undiluted flue gas leaving the Incinerator, shall not exceed 50 parts per million by dry volume.
  - d. The operating temperatures leaving the secondary combustion chamber of the Incinerator, as monitored by the Continuous Monitoring System, shall not be less than 1,000 degrees Celsius at a residence time of not less than 2 seconds, with a recording time resolution as specified in the Continuous Monitoring Plan.
  - e. The opacity, as recorded by the Continuous Monitoring System in the flue gas leaving the Incinerator stack, shall:
    - i. not exceed 5 percent, calculated as the rolling arithmetic average of 2 hours of data; and
    - ii. meet the requirements of Section 46 of O. Reg. 419/05.

- f. The concentration of suspended particulate matter in the flue gas leaving the Incinerator stack shall not exceed 14 milligrams per dry cubic metre normalized to 11 percent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals.
- g. The concentration of mercury in the flue gas leaving the Incinerator stack shall not exceed 20 micrograms per dry cubic metre normalized to 11 percent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals.
- h. The concentration of isomers of dioxins and furans, as outlined in Schedule C of this Approval, in the flue gas leaving the Incinerator stack, shall not exceed 80 picograms per dry cubic metre in toxicity equivalent normalized to 11 percent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals, as calculated following the procedure outlined in Schedule C of this Approval.
- i. The concentration of hydrogen chloride, as recorded by the Continuous Monitoring System in the flue gas leaving the Incinerator stack, shall not exceed 27 milligrams per dry cubic metre normalized to 11 percent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals and calculated as the rolling arithmetic average of 24 hours of data, with a time resolution as specified in the Continuous Monitoring Plan.
- j. The concentration of nitrogen oxides (as nitrogen dioxide), as recorded by the Continuous Monitoring System in the flue gas leaving the Incinerator stack, shall not exceed 198 milligrams per dry cubic metre normalized to 11 percent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals and calculated as the rolling arithmetic average of 24 hours of data, with a time resolution as specified in the Continuous Monitoring Plan.
- k. The concentration of sulphur dioxide in the flue gas leaving the Incinerator stack, shall not exceed 56 milligrams per dry cubic metre normalized to 11 percent oxygen at a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals.

## **5. DOCUMENTATION REQUIREMENTS**

- 1. The Company shall maintain an up-to-date Log.
- 2. No later than March 31 in each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
- 3. The Company shall make the Emission Summary Table (see section 27 of O. Reg. 419/05) and Acoustic Assessment Summary Table available for examination by any person, without charge, by posting it on the Internet or by making it available during regular business hours at the Facility.

4. The Company shall, within three (3) months after the expiry of Condition 2.1 of this Approval, update the ESDM Report and the Acoustic Assessment Report such that the information in the reports is accurate as of the date that Condition 2.1 of this Approval expired.
5. Conditions 5.1 and 5.2 do not apply if Condition 2.1 has expired.

## **6. WRITTEN SUMMARY FORM AND ANNUAL REPORTING**

1. Subject to Condition 6.2, the Company shall prepare, and make available to the Ministry upon request, no later than June 30 of each year, a Written Summary Form signed by the Highest Ranking Person.
2. Condition 6.1 does not apply if:
  - a. Condition 2.1 has expired; and
  - b. the Written Summary Form has been completed for the year in which Condition 2.1 expired.
3. The Company shall prepare and submit an annual summary report to the District Manager not later than March 31 of each year. The annual summary report shall include, but not be limited to, the summaries of the amounts of Wastes and Waste Oil burned, the types and sources of the Wastes burned, any non-compliance with the performance limits as specified in Condition 4 of this Approval, any environmental complaint received, a summary and interpretation of compliance and monitoring data collected, description of any operating problems encountered and corrective action taken.

## **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;
  - f. procedures for record keeping activities relating to the operation and maintenance programs;
  - g. procedures to identify and record the Wastes and their types (chlorinated and non-chlorinated, liquid or solid);

- h. procedures to handle, store and feed the Wastes and to remove, handle and dispose ash from the Incinerator; and
  - i. procedures to calibrate the Continuous Monitoring System.
- 2. The Company shall ensure that all Processes with Significant Environmental Aspects and the Continuous Monitoring System are operated and maintained in accordance with this Approval, the operating procedures and maintenance programs.
- 3. If the Wastes contain chlorinated constituents, the operating temperatures of the Incinerator, as recorded by the Continuous Monitoring System in the secondary chamber of the Incinerator, shall be increased to a minimum of 1,200 degrees Celsius at a minimum residence time of two (2) seconds.
- 4. The Company shall not burn more than 45 litres of Waste Oil per hour in the secondary chamber of the Incinerator.

## **8. COMPLAINTS RECORDING AND REPORTING**

- 1. If at any time, the Company receives an environmental complaint from the public regarding the operation of the Equipment approved by this Approval, the Company shall take the following steps:
  - a. Record and number each complaint, either electronically or in a log book. The record shall include the following information: the time and date of the complaint and incident to which the complaint relates, the nature of the complaint, wind direction at the time and date of the incident to which the complaint relates and, if known, the address of the complainant.
  - b. Notify the District Manager of the complaint within two (2) business days after the complaint is received, or in a manner acceptable to the District Manager.
  - c. Initiate appropriate steps to determine all possible causes of the complaint, and take the necessary actions to appropriately deal with the cause of the subject matter of the complaint.
  - d. Complete and retain on-site a report written within five (5) business days of the complaint date. The report shall list the actions taken to appropriately deal with the cause of the complaint and set out steps to be taken to avoid the recurrence of similar incidents.

## **9. NOTIFICATION**

- 1. The Company shall immediately notify the District Manager of non-compliance of performance limits as specified in Condition 4 of this Approval or an equipment upset/malfunction that causes the emergency stack cap opening and the action taken to address the cause of the occurrence.

2. The Company shall prepare and submit to the District Manager a written follow-up event report not later than fourteen (14) days after a non-compliance of performance limits as specified in Condition 4 of this Approval or an equipment upset/malfunction that causes the emergency stack cap opening. The event report shall include:
  - a. a description, time and date of occurrence;
  - b. duration of equipment upset/malfunction;
  - c. the cause of non-compliance or equipment upset/malfunction; and
  - d. the action taken to prevent a reoccurrence.
3. Prior to making a Modification to the Facility that satisfies Condition 2.1 of this Approval, the Company shall notify the District Manager, in writing, not later than thirty (30) days prior to making the Modification to the Facility .

## **10. RECORD KEEPING REQUIREMENTS**

1. Any information requested by any employee in or agent of the Ministry concerning the Facility and its operation under this Approval, including, but not limited to, any records required to be kept by this Approval, shall be provided to the employee in or agent of the Ministry, upon request, in a timely manner.
2. Unless otherwise specified in this Approval, the Company shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this Approval, including,
  - a. a copy of the Original ESDM Report and each updated version;
  - b. a copy of each version of the Acoustic Assessment Report;
  - c. supporting information used in the emission rate calculations performed in the ESDM Reports and Acoustic Assessment Reports;
  - d. the records in the Log;
  - e. copies of each Written Summary Form prepared under Condition 6.1 of this Approval;
  - f. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects; and
  - g. all records related to environmental complaints made by the public as required by Condition 8 of this Approval.

3. Unless otherwise specified in this Approval, the Company shall retain daily records for one (1) year for the calendar year of the following:
  - a. hours of operation of the Incinerator;
  - b. operating temperatures of the Incinerator;
  - c. the Incinerator's burning rates of Wastes and Waste Oil; and
  - d. types and sources of the Wastes.
4. The Company shall retain for at least two (2) years from the date of their creation the following:
  - a. all records produced by the Continuous Monitoring System; and
  - b. all records on the calibration of the Continuous Monitoring System.

## **11. CONTINUOUS MONITORING**

1. The Company shall, install, conduct and maintain the Continuous Monitoring System in accordance with the Continuous Monitoring Plan acceptable to the Manager.

## **12. SOURCE TESTING**

1. The Company shall perform Source Testing following the Source Testing Procedure outlined in Schedule D of this Approval, to determine the rate of emission of the Test Contaminants, listed in Schedule B of this Approval, from the Incinerator.
2. The Company shall repeat the Source Testing on an annual basis unless the Company has received a confirmation in writing from the District Manager to change the frequency of the Source Testing or discontinue the Source Testing.

## **13. CHANGE OF OWNERSHIP**

1. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any of the following changes to Facility operations:
  - a. the ownership of the Facility;
  - b. the operator of the Facility;
  - c. the address of the Company;

- d. the partners, where the Company is or any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c. B.17, shall be included in the notification; or
  - e. the name of the corporation where the Company is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C.39, shall be included in the notification.
2. In the event of any change in ownership of the Facility, the Company shall notify the successor of the existence of this Approval and provide the successor with a copy of this Approval, and the Company shall provide a copy of the notification to the District Manager and the Director.

#### **14. REVOCATION OF PREVIOUS APPROVALS**

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

### **SCHEDULE A**

#### **Supporting Documentation**

1. Environmental Compliance Approval Application, dated April 23, 2024, signed by Kapil Aggarwal, and submitted by the Company;
2. Emission Summary and Dispersion Modelling Report, prepared by Navin Bindra, and dated April 30, 2024;
3. Acoustic Assessment Report, prepared by Cheng Wu Li of Ontario Power Generation and dated November 29, 2024;
4. Revised information, submitted by email on August 16, 2024, and prepared by Navin Bindra / Ontario Power Generation Inc.

## **SCHEDULE B**

### **Test Contaminants**

- Nitrogen Oxides (NO<sub>x</sub>)
- Sulphur Dioxide (SO<sub>2</sub>)
- Total Particulate Matter

### **List of Metals:**

- Arsenic
- Barium
- Beryllium
- Cadmium
- Copper
- Chromium
- Lead
- Manganese
- Mercury
- Nickel
- Silver
- Zinc

### **List of Polychlorinated Biphenyls of Concern:**

- Dichloro biphenyls (D2PCB)
- Trichloro biphenyls (T3PCB)
- Tetrachloro biphenyls (T4PCB)
- Pentachloro biphenyls (P5PCB)
- Hexachloro biphenyls (H6PCB)
- Heptachloro biphenyls (H7PCB)
- Octachloro biphenyls (O8PCB)
- Nanochloro biphenyls (N9PCB)
- Decachloro biphenyls (D10PCB)

### **List of Volatile Organic Compounds:**

- Acetaldehyde
- Acrolein
- Benzene
- 2-butanone
- Chloroethene
- Ethylbenzene
- Formaldehyde
- Phenol
- Styrene
- Tetrachloroethene
- Toluene
- total hydrocarbons
- 1,1,1-trichloroethane
- Trichloroethene
- Xylenes



**List of Polycyclic Organic Matter:**

- acenaphthylene
- acenaphthene
- anthracene
- benzo(a)anthracene
- benzo(b)fluoranthene
- benzo(k)fluoranthene
- benzo(a)fluorene
- benzo(b)fluorene
- benzo(ghi)perylene
- benzo(a)pyrene
- benzo(e)pyrene
- 2-chloronaphthalene
- chrysene
- coronene
- dibenzo(a,c)anthracene
- 9,10 - dimethylantracene
- 7,12 - dimethylbenzo(a)anthracene
- fluoranthene
- fluorene
- indeno(1,2,3 - cd)pyrene
- 2 - methylantracene
- 3 - methylcholanthrene
- 1 - methylnaphthalene
- 2 - methylnaphthalene
- 1 - methylphenanthrene
- 9 - methylphenanthrene
- naphthalene
- perylene
- phenanthrene
- picene
- pyrene
- tetralin
- triphenylene
- dibenzo(a,h)anthracene
- dibenzo(a,e)pyrene
- quinoline
- biphenyl
- o-terphenyl
- m-terphenyl
- p-terphenyl

## SCHEDULE C

### Dioxins, Furans and Dioxin-like PCBs (Polychlorinated Biphenyls)

Toxicity equivalency factors (TEFs) are applied to 29 isomers of dioxins, furans and dioxin-like PCBs to convert them into 2,3,7,8-CDD (tetrachlorodibenzo-p-dioxin) toxicity equivalents. The conversion involves multiplying the concentration of each isomer by the appropriate TEF to yield the TEQ for this isomer. Summing the individual TEQ values for each of the isomers provides the total toxicity equivalent level for the sample mixture.

A table listing the 29 isomers and their TEFs can be found in the MECP publication titled: Summary of Standards and Guidelines to Support Ontario Regulation 416-05 – Air Pollution - Local Air Quality, PIBS 6569e01 dated April 2012 noted below.

No.	Dioxins, Furans, and Dioxin-like PCBs	CASRN	WHO <sub>2005</sub> Toxic Equivalency Factors [TEFs]
1	2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	1
2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin [1,2,3,7,8-PeCDD]	40321-76-4	1
3	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin [1,2,3,4,7,8-HxCDD]	39227-28-6	0.1
4	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin [1,2,3,6,7,8-HxCDD]	57653-85-7	0.1
5	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin [1,2,3,7,8,9-HxCDD]	19408-74-3	0.1
6	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin [1,2,3,4,6,7,8-HpCDD]	35822-46-9	0.01
7	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin [1,2,3,4,6,7,8,9-OCDD]	3268-87-9	0.0003
8	2,3,7,8-Tetrachlorodibenzofuran [2,3,7,8-TCDF]	51207-31-9	0.1
9	1,2,3,7,8-Pentachlorodibenzofuran [1,2,3,7,8-PeCDF]	57117-41-6	0.03
10	2,3,4,7,8-Pentachlorodibenzofuran [2,3,4,7,8-PeCDF]	57117-31-4	0.3
11	1,2,3,4,7,8-Hexachlorodibenzofuran [1,2,3,4,7,8-HxCDF]	70648-26-9	0.1
12	1,2,3,6,7,8-Hexachlorodibenzofuran [1,2,3,6,7,8-HxCDF]	57117-44-9	0.1
13	1,2,3,7,8,9-Hexachlorodibenzofuran [1,2,3,7,8,9-HxCDF]	72918-21-9	0.1

No.	Dioxins, Furans, and Dioxin-like PCBs	CASRN	WHO <sub>2005</sub> Toxic Equivalency Factors [TEFs]
14	2,3,4,6,7,8-Hexachlorodibenzofuran [2,3,4,6,7,8-HxCDF]	60851-34-5	0.1
15	1,2,3,4,6,7,8-Heptachlorodibenzofuran [1,2,3,4,6,7,8-HpCDF]	67562-39-4	0.01
16	1,2,3,4,7,8,9-Heptachlorodibenzofuran [1,2,3,4,7,8,9-HpCDF]	55673-89-7	0.01
17	1,2,3,4,6,7,8,9-Octachlorodibenzofuran [1,2,3,4,6,7,8,9-OCDF]	39001-02-0	0.0003
18	3,3',4,4'-Tetrachlorobiphenyl [3,3',4,4'-tetraCB (PCB 77)]	32598-13-3	0.0001
19	3,4,4',5- Tetrachlorobiphenyl [3,4,4',5-tetraCB (PCB 81)]	70362-50-4	0.0003
20	3,3',4,4',5- Pentachlorobiphenyl (PCB 126) [3,3',4,4',5-pentaCB (PCB 126)]	57465-28-8	0.1
21	3,3',4,4',5,5'- Hexachlorobiphenyl [3,3',4,4',5,5'-hexaCB (PCB 169)]	32774-16-6	0.03
22	2,3,3',4,4'- Pentachlorobiphenyl [2,3,3',4,4'-pentaCB (PCB 105)]	32598-14-4	0.00003
23	2,3,4,4',5- Pentachlorobiphenyl [2,3,4,4',5-pentaCB (PCB 114)]	74472-37-0	0.00003
24	2,3',4,4',5- Pentachlorobiphenyl [2,3',4,4',5-pentaCB (PCB 118)]	31508-00-6	0.00003
25	2',3,4,4',5- Pentachlorobiphenyl [2',3,4,4',5-pentaCB (PCB 123)]	65510-44-3	0.00003
26	2,3,3',4,4',5- Hexachlorobiphenyl [2,3,3',4,4',5-hexaCB (PCB 156)]	38380-08-4	0.00003
25	2,3,3',4,4',5'- Hexachlorobiphenyl [2,3,3',4,4',5'-hexaCB (PCB 157)]	69782-90-7	0.00003
28	2,3',4,4',5,5'- Hexachlorobiphenyl [2,3',4,4',5,5'-hexaCB (PCB 167)]	52663-72-6	0.00003
29	2,3,3',4,4',5,5'- Heptachlorobiphenyl [2,3,3',4,4',5,5'-heptaCB (PCB 189)]	39635-31-9	0.00003

**NOTE:**

- Sum of toxicity equivalents of individual isomers

## **SCHEDULE D**

### **Source Testing Procedures**

1. The Company shall submit, within twelve (12) months of the previous 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 six (6) 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 six (6) 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. types (chlorinated or not) and sources of the Wastes;
    - ii. hourly feed rates of Wastes and Waste Oil to the Incinerator;
  - d. all relevant records produced by the Continuous Monitoring System;
  - e. verification method and source of the data used for demonstrating the residence time requirements, as per Condition 4.6.d of this Approval;
  - f. results of Source Testing, including the emission rate, emission concentration, and relevant emission factor of the Test Contaminants from the Incinerator;

- g. results of dispersion calculations in accordance with AERMOD, or any other method accepted by the Director, indicating the Point of Impingement concentrations of the Test Contaminants listed in Schedule B of this Approval; and
  - h. a tabular comparison of Source Testing results for the Targeted Sources 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, 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. OPERATIONAL FLEXIBILITY, REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION AND PERFORMANCE LIMITS**

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

**3. DOCUMENTATION REQUIREMENTS**

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

**4. WRITTEN SUMMARY FORM AND ANNUAL REPORTING**

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

**5. OPERATION AND MAINTENANCE**

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

**6. COMPLAINTS RECORDING AND REPORTING PROCEDURE**

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

**7. NOTIFICATION**

Condition No. 9 is included to require the Company to notify the District Manager so that the environmental impact and subsequent compliance with the Act, the regulations and this Approval can be verified.

## **8. RECORD KEEPING REQUIREMENTS**

Condition No. 10 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.

## **9. CONTINUOUS MONITORING, SOURCE TESTING**

Conditions No. 11 and 12 are included 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.

## **10. CHANGE OF OWNERSHIP**

Condition No. 13 is included to require the Company to notify/report to the Ministry so that compliance with the EPA, the regulations and this Approval can be verified.

## **11. REVOCATION OF PREVIOUS APPROVALS**

Condition No. 14 is included to identify that this Approval replaces all Section 9 Certificate(s) of Approval and Part II.1 Approvals in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s).  
9277-ANDJ3R issued on October 19, 2017**

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

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

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

The Notice should also include:

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

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

This Notice must be served upon:

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

and

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

and


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

**\* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or [www.olt.gov.on.ca](http://www.olt.gov.on.ca)**

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

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

DATED AT TORONTO this 25th day of March, 2025



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

VA/

c: District Manager, MECP Owen Sound  
Navin Bindra, Ontario Power Generation Inc.