

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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1075-DEETHP Issue Date: July 4, 2025

Rain Carbon Canada Inc. 725 Strathearne Ave N Hamilton, Ontario L8H 5L3

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Site Location: 725 Strathearne Avenue North

Hamilton City,

L8H 5L3

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

- one (1) natural gas fired Thermal Oxidizer, designed for a maximum heat input of 12,600,000 kilojoules per hour, equipped with a natural gas fired burner used to incinerate the following streams:
 - Fume Scrubbing Systems (including fully-enclosed Automated Rail Car Loading System)
 - Fume Gathering and Incineration System
 - Hydrogen Sulphide Scrubber
 - Membrane Biological Reactor

operating at a minimum temperature of 871 degrees Celsius with a minimum gas residence time of 0.5 seconds, discharging to the atmosphere at a maximum flow rate of 11.5 cubic meters per second, through a tack, having an exit diameter of 1.07 meter, extending 23 meters above grade;

• one (1) Enclosed Flare equipped with a natural gas fired continuous pilot burner system to be operated when the Thermal Oxidizer is off-line, having a maximum thermal input of 142,290 kilojoules per hour, operating at a minimum temperature of 871 degrees Celsius with a minimum gas residence time of 0.5 seconds, discharging to the atmosphere at a maximum flow rate of 3.25 cubic meters per second through a stack, having an exit diameter of 0.91 meter, extending 25.00 meters above grade;

- One (1) Hydrogen Sulphide Scrubber with a minimum 99 % control efficiency for distillation off-gases prior to thermal treatment;
- Two (2) Automated Rail Car Loading Stations with enclosed loading and vent system prior to thermal treatment

all in accordance with the Environmental Compliance Approval Application submitted by the Company, dated May 01, 2023 and signed by Gord Gilmet; the supporting information, including the Emission Summary and Dispersion Modelling Report, submitted WSP Canada Inc., dated April 2024 (v7) and signed by Katie Armstrong; and email from Gord Gilmet of the Company on March 24 and May 22, 2025.

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

- 1. "Abatement Plan" means the letter and accompanying attachments sent to Darryl Hagman, dated November 15, 2024 and signed by Gord Gilmet, that includes the identification and assessment of methods to reduce and/or prevent emissions of Benzene, Benzo(a)pyrene, Dimethyl Sulphide, Hydrogen Sulphide, Naphthalene, Total Reduced Sulphur, and Sulphur Dioxide from operations at the Facility, and that includes, but is not limited to, methods such as pollution prevention, process modification, alternative production methods, product modification, product substitution, and/or add-on controls;
- 2. "Accredited Laboratory" mean a laboratory that has been accredited in accordance with the International Standard ISO/IEC 17025 General Requirement for the Competence of Testing and Calibration Laboratories, dated May 5, 2005, as amended from time to time;
- 3. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 and Appendix A of the Basic Comprehensive User Guide, by Appendix A of the Basic Comprehensive User Guide, by Tomasz Nowak / WSP Canada Inc., and dated December 19, 2023 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility and includes all up-dated Acoustic Assessment Reports as required by the Documentation Requirements conditions of this Approval to demonstrate continued compliance with the Performance Limits following the implementation of any Modification;
- 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, up-dated as required by the Documentation Requirements conditions of this Approval;
- 5. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above and any schedules attached to it;
- 6. "Benzene" means benzene with a chemical abstract system (CAS) number of 71-43-2;
- 7. "Benzo(a)pyrene" means benzo(a)pyrene with a chemical abstract system (CAS) number of 50-32-8;
- 8. "Company" means Rain Carbon Canada 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;

- 9. "Continuous Monitoring Plan" means a document and its attachments that provide written description, design specifications, drawings, list of procedures, practices and other relevant technical information that describes the Continuous Monitoring System (CMS) and its components as well as the list of operating and maintenance procedures and maintenance programs;
- 10. "Continuous Monitoring System" (CMS) means the continuous monitoring and data acquisition system used to continuously measure, record and report the configured parameters, such as temperature, pressure, flow and contaminant concentration(s) at specified locations as outlined in the Continuous Monitoring Plan;
- 11. "Delay of Repair List" means the use of an applicable provision related to an LDAR Program wherein the Facility is allowed to delay the repair of an LDAR Component beyond normally allowed repair timelines in the LDAR Program;
- 12. "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;
- 13. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- 14. "Enclosed Flare" means the flare described in the Company's application and in the supporting documentation, to the extent approved by this Approval;
- 15. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 16. "Equipment" means the equipment or processes described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- 17. "ESDM Report" means the Emission Summary and Dispersion Modelling Report that describes the Facility and prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document prepared by WSP Canada Inc., dated April 2024 (v7) and signed by Katie Armstrong;
- 18. "Facility" means the entire operation located on the property where the Equipment is located;
- 19. "Hydrogen Sulphide Scrubber" means a scrubber that is being used to remove reduced sulphur compounds with a minimum 99 % control efficiency from distillation off-gases prior to thermal treatment;
- 20. "LDAR" means leak detection and repair;
- 21. "LDAR Audit Plan" means a document which describes the investigative procedures to determine the accuracy and effectiveness of the LDAR Program in controlling emissions from LDAR Components at

the Facility;

- 22. "LDAR Component" means an apparatus that is part of an industrial process and includes a compressor, a pump, a valve, a pressure relief device, an open ended line, a sample point, an instrumentation system, an agitator, a connector, or any other equipment identified as a component in the LDAR Program;
- 23. "LDAR Program" means the LDAR program for the identification and repair of fugitive equipment leaks to manage and control volatile organic compound emissions (including Benzene), outlined in the document titled "Rain Carbon 2024 Site Specific LDAR Program" submitted by Gord Gilmet and dated January 22, 2025, as amended based on the approval of the District Manager;
- 24. "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, as those duties relate to the conditions of this Approval;
- 25. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf;
- 26. "Monitoring Plan" means the document titled "Monitoring Plan for Benzo(a)pyrene and Benzene" prepared by Golder Associates Ltd. and dated September 2020, as amended based on the approval of the District Manager;
- 27. "Noise Control Measures" means measures to reduce the noise emission from the Facility and/or Equipment including, but not limited to silencers, acoustic louvers, enclosures, absorptive treatment, plenums and barriers.
- 28. "Operations Manual for Air Quality Monitoring in Ontario" means the document titled "Operations Manual for Air Quality Monitoring in Ontario" published by the Government of Ontario, dated May 14, 2019, as amended from time to time, and available on a website of the Government of Ontario;
- 29. "O. Reg. 419/05" means Ontario Regulation 419/05, Air Pollution Local Air Quality;
- 30. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
- 31. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2009, as amended;
- 32. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
- 33. "Professional Engineer" means Professional Engineer as defined within the Professional Engineers Act, R.S.O. 1990, as amended;
- 34. "Publication NPC-207" means the Ministry draft Publication NPC-207, "Impulse Vibration in

Residential Buildings", November, 1983 as amended;

- 35. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
- 36. "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;
- 37. "Qualified Person" means a third-party consultant, contractor or an employee of the Company satisfactory to the District Manager who has obtained the appropriate education and training and has demonstrated experience and expertise in the areas relating to the work required to be carried out in this Approval;
- 38. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:

Schedule A - Supporting Documentation

• Schedule B - Continuous Temperature Monitoring System

• Schedule C - Test Contaminants

• Schedule D - Volatile Organic Compounds

• Schedule E - Source Testing Procedure

- 39. "Source Testing" means site-specific sampling and testing to measure the rates of emissions of Test Contaminants from the Thermal Oxidizer and Enclosed Flare under operating conditions that will derive an emission rate that, for the relevant averaging period of the contaminant, is at least as high as the maximum emission rate that the source of contaminant is reasonably capable of, or a rate approved by the Manager within the approved operating range of the Thermal Oxidizer and Enclosed Flare which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
- 40. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
- 41. "Test Contaminants" means the contaminants listed in Schedule C;
- 42. "Thermal Oxidizer" means the thermal oxidizer referenced in this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- 43. Thermal Oxidizer Design and Performance Acceptance Criteria means the "Attachment-1 Performance test acceptance criterion" prepared by Ship & Shore Environmental Inc. dated September 11, 2023 and

signed by Anu Vij.

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 Continuous Temperature Monitoring System
 - Schedule C Test Contaminants
 - Schedule D Volatile Organic Compounds
 - Schedule E Source Testing Procedure
- 2. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
- 3. The Company shall ensure that any employee authorized to carry out work on or operate any aspect of the Equipment covered by this Approval is informed about the relevant aspects of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 4. Unless a notification timing is otherwise specified in this Approval, the Company shall notify, within 2 days, the District Manager or Provincial Officer by telephone or by email of any contravention of the terms and conditions of this Approval.

2. RECORD RETENTION

- 1. The Company shall retain, for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the recording activities required by this Approval, and make these records available for review by staff of the Ministry upon request. The Company shall retain:
 - a. all records on the maintenance, repair and inspection of the Equipment; and

- b. all records of any environmental complaints, including:
 - i. a description, time and date of each incident to which the complaint relates;
 - ii. wind direction at the time of the incident to which the complaint relates; and
 - iii. a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.

3. FACILITY OPERATION

- 1. The Company shall ensure that the Thermal Oxidizer is designed and operated to comply, at all times, with the following requirements:
 - a. the temperature in the combustion chamber of the Thermal Oxidizer is maintained at a minimum of 871 degrees Celsius, as measured by the Continuous Monitoring System, at all times, when the Thermal Oxidizer is in operation; and
 - b. the residence time of the combustion gases in the combustion chamber of the Thermal Oxidizer shall not be less than 0.5 seconds at a minimum temperature of 871 degrees Celsius.
- 2. The Company shall ensure that the Enclosed Flare is designed and operated to comply, at all times, with the following requirements:
 - a. the temperature in the combustion chamber of the Enclosed Flare is maintained at a minimum of 871 degrees Celsius, at all times, when the Enclosed Flare is in operation; and
 - b. the residence time of the combustion gases in the combustion chamber of the Enclosed Flare shall not be less than 0.5 seconds at a minimum temperature of 871 degrees Celsius.
 - c. the Enclosed Flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours.
- 3. The Company shall notify the District Manager, within the next business day, of any upset conditions or malfunctions to the Enclosed Flare operation that result in failure to meet the requirements of the Enclosed Flare conditions in this Approval, including but not limited to, events that results in the operation of the Enclosed Flare such that at least 97% of any gaseous component vented to the Enclosed Flare is not destroyed.

4. SPARE PARTS

1. The Company shall prepare a list of critical spare parts needed to ensure that repairs or replacement of leaking components captured by LDAR Program can occur as soon as practicable

after leak determined.

- 2. The list of critical parts for the Equipment shall be reviewed and updated annually or more frequently, if necessary, to ensure that this list is maintained up-to-date.
- 3. The Company shall ensure that the critical spare parts are available at the Facility at all times or be immediately available from an off-Site supplier.

5. NON-CONTINUOUS MONITORING – BENZENE AND BENZO(A)PYRENE (ONSITE)

- 1. The Company shall continue to follow the Monitoring Plan for the measurements of Benzene and Benzo(a)Pyrene at locations in accordance with the Monitoring Plan until written approval is received by the Company from the District Manager to alter or discontinue the Monitoring Plan.
- 2. The company shall update the frequency of monitoring set out in the Monitoring Plan such that sampling of Benzo(a)Pyrene occurs every 6 days and Benzene occurs every 12 days. If requested by the Company in writing with appropriate rationale, the frequency of monitoring may be reduced by District Manager's written approval.
- 3. After the completion of eight (8) monthly progress reports, the frequency of progress reporting may be reduced, eliminated or otherwise modified by the District Manager, if requested by the Company in writing with appropriate rationale.

6. PASSIVE PROPERTY LINE MONITORING - BENZENE

- 1. No later than twelve (12) months from the date of this approval, the Company shall ensure the concentration of benzene discharged from the facility into the air is sampled as described in this condition.
- 2. Install and operate a minimum of six monitors in accordance with the Operations Manual for Air Quality Monitoring in Ontario, that continuously samples Benzene in the air, at locations along the property line approved by the District Manager, for every two-week period.
- 3. The Company shall analyze the sample collected in Condition 6(2) every two week as soon as reasonably possible by an Accredited Laboratory to determine the concentration of Benzene in micrograms per cubic metre.
- 4. For each two-week sample described in Condition 6(2), record the following at a minimum:
 - a. the dates of the two-week sampling period used to continuously accumulate benzene in the air,
 - b. the date the sample was analysed,

- c. the concentration of benzene in micrograms per cubic metre, and
- d. the monitor location from which the sample was taken.
- 5. Beginning twelve (12) months from the date operation of monitors began to sample benzene accumulated in the air as described in Condition 6(2), record the rolling annual average concentration of Benzene at each monitor, for the most recent 12-month period, and the dates of the 12-month period to which the rolling annual average concentration corresponds.

7. CONTINUOUS PROPERTY LINE MONITORING - BENZENE

- 1. No later than three (3) months from the date of this Approval, the Company shall assign a Qualified Person satisfactory to the District Manager, to develop and carry out a property line air monitoring program for Benzene as described in this condition.
- 2. No later than twelve (12) months from the date of this Approval, the Company shall measure the concentration of Benzene continuously along the Facility's property line into the air using gas chromatography or mass spectroscopy in accordance with the following, at a minimum:
 - a. install and operate a minimum of one monitor, in accordance with the Operations Manual for Air Quality Monitoring in Ontario and at locations and using methods approved by the District Manager, on each of the North, East, South and West property line of the Facility to measure the concentration of Benzene in the air at least every 10 minutes.
 - b. determine and record the concentration of Benzene, at each monitor, at the specified averaging periods below:
 - i. once every hour, calculations to determine the concentration of Benzene averaged over the previous one-hour period.
 - ii. once every hour, calculations to determine the concentration of Benzene averaged over the previous 24-hour period.
 - iii. once every day, calculations to determine the concentration of Benzene averaged over the previous 365-day period.
 - c. each monitor shall be programmed to alert the Company and Ministry staff specified by the District Manager of any exceedance of Benzene of the following thresholds immediately:
 - i. 90 micrograms per cubic metre averaged over any one-hour period;
 - ii. 30 micrograms per cubic metre averaged over any 24-hour period.
- 3. The Company shall have one or more back-up measurement method(s) that are capable of continuously sampling Benzene in the air over a complete 24-hour period, and reporting a

- 24-hour average benzene concentration every 24-hour period, at any location approved in subparagraph (a) of Condition 7(2) once any monitor mentioned in subparagraph (a) of Condition 7(2) fails to accurately measure the concentration of Benzene.
- 4. During any period when a monitor mentioned in subparagraph (a) of Condition 7(2) fails to accurately measure the concentration of Benzene in the air for more than 24 hours, the Company shall deploy the back-up measurement method referenced in Condition 7(3) at the location of the monitor that failed to measure, to continuously sample Benzene in the air over every 24-hour period that any monitor mentioned in subparagraph (a) of Condition 7(2) fails to accurately measure the concentration of Benzene.
- 5. No later than twelve (12) months from the date of this Approval, the Company shall collect meteorological data at the Facility, in accordance with the following, at a minimum:
 - a. install and operate a monitor, in accordance with the Operations Manual for Air Quality Monitoring in Ontario that is acceptable to the District Manager and representative of the meteorological conditions including ambient temperature, wind direction and wind speed, at a minimum frequency of at least every 10 minutes.
 - b. once every hour, determine and record the meteorological conditions mentioned in subparagraph (a), averaged over the previous one-hour period.
- 6. The Company shall make any records related to Condition 7 available for Ministry staff upon request in the format and time periods requested.

8. PROPERTY LINE MONITORING – BENZENE ACTION LEVELS

- 1. If a concentration of Benzene that is calculated under subparagraph (b) of Condition 7(2) exceeds any of the following concentrations, the Company shall as soon as practicable notify the District Manager and a provincial officer:
 - a. 90 micrograms per cubic metre averaged over any one-hour period;
 - b. 30 micrograms per cubic metre averaged over any 24-hour period.
- 2. The notification required in Condition 8(1) shall include the following information:
 - a. the date and time that the averaging period in respect of the contravention began and ended.
 - b. an indication of which subparagraph of Condition 8(1) is contravened.
 - c. the location of the measured concentration.
 - d. the concentration of Benzene over the relevant averaging period of the exceedance.

- e. a description of the operating conditions at the Facility during the relevant averaging period of the exceedance.
- f. a description of the meteorological conditions at the Facility during the relevant averaging period of the exceedance, including temperature, wind direction and wind speed.
- 3. If the calculated concentration in subparagraph (b) of Condition 7(2) results in two or more contraventions of subparagraph (a) or (b) of Condition 8(1), after providing notice under Condition 8(2), the Company shall notify the district manager and a provincial officer in writing as soon as practicable,
 - a. after each subsequent contravention calculated in of Condition 8(1); or
 - b. after there are no more subsequent contraventions calculated in Condition 8(1).
- 4. The Company shall immediately after notification is given under Condition 8(1), investigate the cause of the Benzene discharge and shall implement measures to reduce the discharge as soon as it is possible.
- 5. No later than 14 days after giving notice under Condition 8(1), the Company shall submit to the District Manager and a provincial officer a report that includes the following information for all notifications in this period:
 - a. an identification and detailed analysis of the suspected cause of the contravention.
 - b. an identification of the measures that have been or will be implemented to correct the cause of the contravention and prevent or reduce the risk of a similar discharge happening again, including,
 - i. if any of the measures have already been implemented, the implementation dates;
 - ii. the expected implementation dates of measures that will be implemented in the future; and
 - iii. based on the analysis mentioned in subparagraph (a) of 8(5), an explanation of why the identified measures will be effective in correcting the cause of the contravention and preventing or reducing the risk of a similar discharge happening again.
- 6. The Company shall take all reasonable actions to ensure that the measures identified under subparagraph (b) of Condition 8(5) are implemented by the dates identified under that subparagraph.
- 7. Each month, until all the measures identified under subparagraph (b) of Condition 8(5) are implemented, the company shall update the information in the report and shall submit the

updated report to the District Manager and a provincial officer.

9. AMBIENT COMMUNITY MONITORING – BENZENE

- 1. No later than three (3) months from the date of this approval, the Company shall assign a Qualified Person satisfactory to the District Manager, to carry out an air monitoring program for Benzene as described in this condition.
- 2. No later than twelve (12) months from the date of this approval, the Company shall measure the concentration of Benzene in the air using gas chromatography or mass spectroscopy at Windermere Basin Park, located at 105 Eastport Drive in Hamilton, in accordance with the following, at a minimum:
 - a. install and operate a monitor, in accordance with the Operations Manual for Air Quality Monitoring in Ontario, at a location and using methods approved by the District Manager, to measure the concentration of Benzene in the air at least every 10 minutes.
 - i. determine and record the concentration of Benzene at the monitor, at the specified averaging periods below: Once every hour, calculations to determine the concentration of Benzene averaged over the previous one-hour period;
 - ii. once every hour, calculations to determine the concentration of Benzene averaged over the previous 24-hour period.
 - iii. once every day, calculations to determine the concentration of Benzene averaged over the previous 365-day period.
- 3. The Company shall have one or more back-up measurement method(s) that are capable of continuously sampling Benzene in the air over a complete 24-hour period, and reporting a 24-hour average benzene concentration every 24-hour period, at any location approved in subparagraph (a) of Condition 9(2) once any monitor mentioned in subparagraph (a) of Condition 9(2) fails to accurately measure the concentration of Benzene.
- 4. During any period when a monitor mentioned in subparagraph (a) of Condition 9(2) fails to accurately measure the concentration of Benzene in the air for more than 24 hours, the Company shall deploy the back-up measurement method referenced in Condition 9(3) at the location of the monitor that failed to measure, to continuously sample Benzene in the air over every 24-hour period that any monitor mentioned in subparagraph (a) of Condition 9(2) fails to accurately measure the concentration of Benzene.
- 5. No later than twelve (12) months from the date of this Approval, the Company shall assign a Qualified Person satisfactory to the District Manager to collect meteorological data at Windermere Basin Park, located at 105 Eastport Drive in Hamilton, in accordance with the following, at a minimum:

- a. install and operate a monitor, in accordance with the Operations Manual for Air Quality Monitoring in Ontario that is acceptable to the District Manager and representative of the meteorological conditions including ambient temperature, wind direction and wind speed, at a minimum frequency of at least every 10 minutes.
- b. once every hour, determine and record the meteorological conditions mentioned in subparagraph (a), averaged over the previous one-hour period.
- 6. The Company shall make any records related to Condition 9 available for Ministry staff upon request in the format and time periods requested.

10. PUBLIC REPORTING AND NOTIFICATION

- 1. The Company shall ensure that the information set out in Condition 6(4) is posted on a publicly accessible website(s) as soon as practicable.
- 2. The Company shall ensure that the following information, in respect of the calculated averages mentioned in subparagraph (b)(i) of Condition 7(2), subparagraph (b) of Condition 7(5), subparagraph (a)(i) of Condition 9(2), and subparagraph (b) of Condition 9(5) is posted on a publicly accessible website(s) within one (1) hour after the end of the period over which the calculated concentration is averaged:
 - a. the result of the calculation;
 - b. the location of the measurements underlying the calculation in a map;
 - c. the date and time that the averaging period for the calculation began and ended;
- 3. If any of the posted measurements mentioned in Condition 10(1) or Condition 10(2) are determined to be invalid, the Company shall ensure that those measurements are highlighted on the publicly accessible website(s) in a manner that indicates the invalidity.
- 4. If it is determined that any of the measurements posted under Condition 10(3) are invalid, the Company shall notify the District Manager no later than thirty (30) days after the determination is made.
- 5. A notification under Condition 10(4) shall include the following information:
 - a. description of the validation process;
 - b. the results of the validation process;
 - c. an explanation of why the measurement is invalid; and

d. an identification of steps that will be taken to prevent invalid measurements in the future.

11. AMBIENT AIR MONITORING PLAN

1. No later than twelve (12) months from the date of this approval, the company shall submit an ambient air monitoring plan to the District manager for approval, in accordance with the Operations Manual for Air Quality Monitoring in Ontario including, at a minimum, the requirements stipulated in Conditions 5, 6, 7, 8, 9, and 10.

12. CONTINUOUS PROCESS MONITORING

- 1. The Company shall continuously monitor, record, retain and report the following parameters in the undiluted gas leaving the Thermal Oxidizer and Enclosed Flare in accordance with this condition:
 - a. Sulphur dioxide concentration;
 - b. Carbon monoxide concentration;
 - c. Oxygen concentration; and
 - d. any additional parameters, such as flow rate, required to determine the mass emission rates of the parameters listed above.
- 2. The Company shall continuously monitor and record the temperature in the combustion chamber of the Thermal Oxidizer, when the Thermal Oxidizer is in operation.
- 3. The Company shall continuously monitor and record the temperature in the combustion chamber of the Enclosed Flare, when the Enclosed Flare is in operation.

4. The Company shall:

- a. initiate consultation with the District Manager regarding the development of a Continuous Monitoring Plan within two (2) weeks from the date of this Approval;
- b. finalize and submit the Continuous Monitoring Plan to the District Manager within ninety (90) days from the date of this Approval;
- c. procure, install, operate and maintain the Continuous Monitoring System not later than ten (10) months after the District Manager has approved the Continuous Monitoring Plan or as otherwise agreed to in writing by the District Manager;
- d. maintain a current copy of the Continuous Monitoring Plan at an accessible location for easy access by persons responsible for supervising, operating and maintaining the Continuous

Monitoring Systems;

- e. make the raw data available for Ministry staff upon request in the format and the periods requested;
- f. conduct applicable Facility acceptance testing, certification testing and commissioning testing on the Continuous Monitoring System in accordance with the approved Continuous Monitoring Plan, within six (6) months after installation and notify the District Manager (via email) at least fifteen (15) days prior to any impending testing, along with a summary of the testing strategies to be used; and
- g. submit all applicable Facility acceptance, certification and commissioning test reports to the District Manager, not later than three (3) months after commissioning and request an onsite Continuous Monitoring System commissioning audit by the Ministry.
- 5. If the District Manager does not accept the results of the commissioning test results, the District Manager may require the Company to repeat the commissioning tests on the Continuous Monitoring Systems and re-submit for approval of the commissioning test results.
- 6. The Company shall submit a copy of the revised Continuous Monitoring Plan before changes are made to the Continuous Monitoring Systems and/or associated operational procedures, maintenance program or performance evaluations regime and seek approval of the revised Continuous Monitoring Plan by the District Manager.

13. LEAK DETECTION AND REPAIR (LDAR) PROGRAM

- 1. The Company shall implement the LDAR Program at the Facility.
- 2. The Company shall, on an annual basis, review and update the existing LDAR Program, as needed, to incorporate changes relevant to the Facility's operations.
- 3. The Company shall make any records related to the LDAR Program available for Ministry staff upon request in the format and time periods requested.

14. LEAK DETECTION AND REPAIR (LDAR) AUDIT REQUIREMENTS

- 1. The Company shall develop a Leak Detection and Repair (LDAR) Audit Plan. The plan shall describe the investigative procedures used to determine the accuracy and effectiveness of the LDAR Program and shall include as a minimum the following:
 - a. reviewing of calibrations and specifications of equipment used in the LDAR Program;
 - b. auditing of all documentation and databases used as part of the LDAR Program;

- c. reviewing of Delay of Repair List;
- d. field reviews or audits by internal or third party, not involved in the implementation of the LDAR Program, including comparative monitoring and technician observations;
- e. reviewing of monitoring data for monitoring pace, time between monitoring events, and/or any other indications of omissions or errors; and
- f. reviewing of the LDAR Program for conformance with all applicable federal and provincial legal requirements.
- 2. The Company shall conduct the LDAR audit in accordance with the LDAR Audit Plan for the LDAR Program implemented in the 2026 calendar year and shall repeat the LDAR audit three (3) years thereafter.
- 3. The Company shall submit a LDAR audit report describing the finding of the LDAR audit, signed by a Professional Engineer, to the District Manager within six (6) months after the end of the calendar year to which the audit applies.
- 4. The Company shall implement the recommendations identified in the LDAR audit report within the recommended completion dates, or as directed or agreed to in writing by the District Manager.
- 5. The Company shall update the LDAR Audit Plan, as necessary, keep a log of the revisions to the LDAR Audit Plan and make it available to the Ministry staff upon request.

15. ABATEMENT PLAN

- 1. The Company shall implement the Abatement Plan.
- 2. The Abatement Plan shall be updated as necessary or at the direction of the District Manager.

16. SPILL PREVENTION AND CONTINGENCY PLAN

- 1. The Company shall implement and maintain a Spill Prevention and Contingency Plan for the Facility or equivalent plan for the Facility that has been prepared on a voluntary basis, or for another regulator, if that plan meets the requirements of following condition. The Spill Prevention and Contingency Plan shall include, but not necessarily be limited to:
 - a. emergency response procedures and operational procedures to be undertaken in the event of a spill or process upset, including specific steps to be taken for each type of Spill or process upset that could occur at the Facility;
 - b. a list of equipment and spill clean up materials available in case of an emergency;

- c. contingency procedures to be followed in the event of equipment malfunction, or process upset; and
- d. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Site, the Ministry's District Office and Spills Action Centre, the local municipal fire department, the local municipal authority, the local Medical Officer of Health, the Ministry of Labour, and the names and telephone numbers of companies available for emergency response.
- 2. The Company shall review the Spill Prevention and Contingency Plan each time a Spill occurs and at a minimum on an annual basis and shall ensure that the information required under subparagraph (d) of Condition 16(1) is up-to date, and that this information is readily available to all staff and emergency response personnel.
- 3. The District Manager shall be notified within thirty (30) days of any changes to the Spill Prevention and Contingency Plan.
- 4. The equipment, materials and personnel requirements outlined in the Spill Prevention and Contingency Plan are required to be kept at the Facility and shall be immediately available at all times. The equipment shall be kept in a good state of repair and in a fully operational condition.
- 5. The Company shall promptly take all necessary steps to contain and clean up any spills or upsets which result from this operation. All spills and upsets shall be recorded in a written log or an electronic file format, as to the nature of the spill or upset, and action taken for clean-up, correction and prevention of future occurrences.
- 6. All spills, as defined in the EPA, shall be immediately reported to the Ministry's Spill Action Centre at 1-800-268-6060 and to the local municipal authority.

17. 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.

18. PERFORMANCE LIMITS

- 1. 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.
- 2. 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.

19. ENVIRONMENTAL COMPLIANCE APPROVAL APPLICATION

1. Two (2) years from the date of this Approval the Company shall submit an application for review of the Approval.

20. SOURCE TESTING

1. The Company shall perform Source Testing in accordance with the procedures in Schedule E to determine the rates of emissions of the Test Contaminants from the Thermal Oxidizer and Enclosed Flare within two (2) months after the Manager has approved the Pre-Test Plan or a date agreed by the District Manager, in consultation with the Manager.

SCHEDULE A - Supporting Documentation

- ESDM Report
- Monitoring Plan.
- Abatement Plan.
- LDAR Program,

LOCATIONS:

• Thermal Oxidizer Design and Performance Acceptance Criteria

SCHEDULE B - Continuous Temperature Monitoring System

PARAMETER:		
Temperature		

The sample points for the continuous temperature monitoring and recording system shall be located

where the measurements are representative of the minimum temperature of the gases at the following locations:

- 1. leaving the combustion chamber of the Thermal Oxidizer, and;
- 2. leaving the combustion chamber of the Enclosed Flare.

PERFORMANCE:

The continuous temperature monitoring and recording system shall meet the following minimum performance specifications for the following parameters.

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

DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor without a significant loss of accuracy and with a time resolution of 1 minute or better.

RELIABILITY:

The continuous temperature monitoring system shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.

Schedule C - Test Contaminants for Source Testing

- 1. Nitrogen oxides
- 2. Hydrogen chloride
- 3. Organic matter (expressed as equivalent methane)
- 4. Sulphur dioxide
- 5. Carbon monoxide
- 6. Particulate matter
- 7. Napthalene,
- 8. Benzo(a)pyrene
- 9. Volatile organic compounds contained in Schedule "D" of this Approval

Schedule D - Volatile Organic Compounds

- 1. Acetaldehyde
- 2. Acetone
- 3. Acrolein
- 4. Benzene
- 5. Butadiene, 1,3 -
- 6. Cumene
- 7. Ethylbenzene
- 8. Formaldehyde
- 9. Styrene
- 10. Toluene
- 11. Xylenes, m-, p- and o-

Schedule E - Source Testing Procedures

- 1. The Company shall submit, not later than three (3) months from the date of this Approval, 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 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.
- 4. The Company shall submit a report on the Source Testing to the Manager (electronic format), the District Manager and the Director (electronic and hard copy formats) not later than three (3) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
 - 1. an executive summary;
 - 2. an identification of the applicable North American Industry Classification System code (NAICS) for the Facility;
 - 3. records of operating conditions at the time of Source Testing, including but not limited to the following:
 - a. production data and equipment operating rate as a percentage of maximum capacity;
 - b. Facility/process information related to the operation of the Thermal Oxidizer and Enclosed Flare; and
 - c. Continuous Monitoring System data (if any) at the time of Source Testing;
 - 4. results of Source Testing, including the emission rate, emission concentration, and relevant emission factor of the Test Contaminants from the Thermal Oxidizer and Enclosed Flare;
 - a tabular comparison of calculated emission rates and emission factors based on Source Testing results for the Test Contaminants to relevant estimates described in the ESDM Report, and,
- 5. The Director may not accept the results of the Source Testing if:
 - 1. the Source Testing Code or the requirement of the Manager were not followed;
 - 2. the Company did not notify the Manager, the District Manager and Director of the Source Testing; or

- 3. the Company failed to provide a complete report on the Source Testing.
- 6. If the Director does not accept the result 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.
- 7. The Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 and the Procedure Document with the results from the Source Testing, not later than March 31st each year and make these records available for review by staff of the Ministry upon request.
- 8. The Company shall repeat the Source Testing:
 - 1. once every year after the first Source Testing for the Thermal Oxidizer and Enclosed Flare and/or as directed or agreed by the District Manager in consultation with the Manager.

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

- 1. Conditions No. 1, 3, 4, 15, and 16 are 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.
- 2. Condition No. 2 is included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, the Regulations and this Approval can be verified.
- 3. Condition No. 10 is included to require the Company to notify staff of the Ministry so as to assist the Ministry with the review of the Facility's compliance.
- 4. Condition No. 18 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.
- 5. Conditions No. 5, 6, 7, 8, 9, 11, 12, 13, 14 and 20 are included to require the Company to gather accurate information so that compliance with the EPA, the regulations and this Approval can be verified.
- 6. Conditions No. 17 and 19 are 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.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing shall ("the Notice") 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:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

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

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

DATED AT TORONTO this 4th day of July, 2025

Nancy E Orpana, P.Eng.

Director

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

BS/

c: District Manager, MECP Hamilton - District Katie Armstrong, WSP Canada Inc.