

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1738-D47QK8 Issue Date: May 28, 2024

Birla Carbon Canada Ltd. 755 Parkdale Ave N Hamilton, Ontario L8H 7N5

Site Location:755 Parkdale Ave N Hamilton, Ontario

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:

two (2) tail gas fired boilers, designated as Boiler #1, equipped with a tail gas main burner having a maximum heat input of 245,815,000 kilojoules per hour, and an auxiliary natural gas fired burner used for start-up and emergency conditions having a maximum heat input of 63,300,000 kilojoules per hour; and designated as Boiler #2, equipped with a tail gas main burner having a maximum heat input of 148,755,000 kilojoules per hour, and an auxiliary natural gas fired burner used for start-up and emergency conditions having a maximum heat input of 73,850,000 kilojoules per hour, both tail gas fired boilers exhaust into the atmosphere through a common stack, having an exit diameter of 3.10 metres extending 65 metres above grade;

one (1) stack, discharging process tail gas during reactor start-up and shutdown operations, designated as Boiler #1 Bypass, exhausting into the atmosphere through a stack having an exit diameter of 0.9 metre extending 11.7 metres above the roof and 27 metres above grade;

one (1) stack, discharging process tail gas during reactor start-up and shutdown operations, designated as Boiler #2 Bypass, exhausting into the atmosphere through a stack having an exit diameter of 1.83 metres extending 11.7 metres above the roof and 27 metres above grade;

seven (7) dryers exhausting into the atmosphere through a common stack, designated as Dryer Exhaust, having an exit diameter of 3.1 metres extending 65 metres above grade;

one (1) dust collector discharging emissions generated from the packaging of the finished carbon black product, exhausting to the atmosphere through a stack, designated as Packer Vent Collector, having an exit diameter of 0.46 metre extending 5.0 metres above grade;

one (1) dust collector discharging emissions from the warehouse, exhausting to the atmosphere through a stack, designated as Warehouse Vent Collector, having an exit diameter of 1.0 metre extending 10.0 metres above grade;

five (5) vapour bag collectors, exhausting to the atmosphere through a stack, designated as Vapour Bag Collector (1,2,3,4,5), having an exit diameter of 0.91 metre extending 43 metres above grade;

two (2) vapour bag collectors, exhausting to the atmosphere through a stack, designated as Vapour Bag Collector (6,7), having an exit diameter of 0.6 metre extending 43 metres above grade;

three (3) vent collectors, exhausting to the atmosphere through a stack, designated as Vent Collectors (North, South, No.3), having an exit diameter of 1.07 metres extending 24.7 metres above grade;

seven (7) bag filter vents discharging emissions generated from the air used to convey product from the bag collecors to pulverizers and dense tanks, exhausting to the atmosphere through six (6) stacks:

designated as #1-2 Bag Filter Vent, having an exit diameter of 0.3 metre extending 20.8 metres above grade;

designated as #3 Bag Filter Vent, having an exit diameter of 0.3 metre extending 17.9 metres above grade;

designated as #4 Bag Filter Vent, having an exit diameter of 0.3 metre extending 17.9 metres above grade;

designated as #5 Bag Filter Vent, having an exit diameter of 0.3 metre extending 20.3 metres above grade;

designated as #6 Bag Filter Vent, having an exit diameter of 0.3 metre extending 17.9 metres above grade;

designated as #7 Bag Filter Vent, having an exit diameter of 0.3 metre extending 17.9 metres above grade;

twelve (12) above ground storage tanks used for the storage of feedstock oils:

three (3) storage tanks, each with a capacity of 8,895,720 liters (2,350,000 gallons), for the storage of decant feedstock oil;

- two (2) storage tanks, each with a capacity of 4,769,620 liters (1,260,000 gallons), for the storage of coal tar or decant feedstock oil;
- four (4) storage tanks, each with a capacity of 378,540 liters (100,000 gallons), for the intermediate storage of decant and coal tar feedstock oils;
- three (3) storage tanks used for the storage of coal (dirty) tar oil, filtered (clean) coal tar oil, and HDU furnace feedstock oil;
- one (1) baghouse dust collector to control emissions from the unloading of product from hopper cars or truck trailers, exhausting to the atmosphere through a stack, designated as Source C, having an exit diameter 0.2 metre extending 6.7 metres above the roof and 14.9 metres above grade;
- one (1) housekeeping dust collector serving the warehouse packaging and storage area, exhausting to the atmosphere through a stack, designated as Source D, having an exit diameter of 0.2 metre discharging 5.5 metres below the roof and 7.9 metres above grade; and
- one (1) housekeeping dust collector serving the operation area including the screen room and pulverizer/dense houses, exhausting to the atmosphere through a stack, designated as Source E, having an exit diameter of 0.2 metre discharging 3.65 metres above grade;

all in accordance with the Application for an Environmental Compliance Approval (Air & Noise) dated September 22, 2022 and signed by Willem Brits, the Emission Summary and Dispersion Modelling Report dated March 31, 2024 and signed by Erik Martinez, GHD Limited, the Acoustic Assessment Report dated October 7, 2022 and signed by Michael Masschaele, GHD Limited.

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

- 1. "Abatement Plan" means the letter sent to Lubna I. Hussain dated May 6, 2024 and signed by Willem Brits, that includes the identification and assessment of methods to reduce or prevent emissions of 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. "Approval" means this Environmental Compliance Approval, including the

- application and supporting documentation listed above;
- 3. "Baghouse Leak Detection System" means a system that is capable of continuously monitoring relative particulate matter loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions, and is equipped with an audible alarm system, located where it is easily heard by operating personnel at the Facility, that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected and alert the operating personnel of the upset condition for implementing corrective action.
- "Best Management Practices Plan" means a document or a set of documents which describe measures to minimize dust emissions from the Facility and/or Equipment;
- 5. "Company" means Birla Carbon Canada Ltd. that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
- 6. "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;
- 7. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- 8. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 9. "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;
- 10. "Facility" means the entire operation located on the property where the Equipment is located:
- 11. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
- 12. "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;
- 13. "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;
- 14. "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; and
- 15. "Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources" means the Ministry publication "Technical Bulletin: management approaches for

industrial fugitive dust sources", March 8, 2017, as amended.

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. OPERATION AND MAINTENANCE

- 1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
 - a. prepare, not later than three (3) months after the date of this Approval, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:
 - i. routine operating and maintenance procedures in accordance with good engineering practices and as recommended by Equipment suppliers, including those for the baghouses and Baghouse Leak Detection Systems installed at the Facility;
 - ii. routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
 - iii. emergency procedures, including spill clean-up procedures;
 - iv. procedures for any record keeping activities relating to operation and maintenance of the Equipment;
 - v. all appropriate measures to minimize noise and odorous emissions from all potential sources; and
 - vi. the frequency of inspection and replacement of the filter material in the Equipment;
 - b. implement the recommendations of the Manual.
- 2. The Company shall implement the Abatement Plan for the mitigation of sulphur dioxide emissions.

2. RECORD RETENTION

1. The Company shall retain, for a minimum of two (2) 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. NOTIFICATION OF COMPLAINTS

- 1. The Company shall notify the District Manager, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
 - a. a description of the nature of the complaint; and
 - b. the time and date of the incident to which the complaint relates.

4. 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.
- 3. Reactor flue gas shall bypass Boiler #1 and Boiler #2 for a maximum of 15 minutes on start up and shut down of the reactors.

5. CHANGE OF OWNERSHIP

- 1. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manger, within thirty (30) days of the occurrence of any 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.

6. FUGITIVE DUST CONTROL

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

7. EMERGENCY RESPONSE PLAN

- 1. The Company shall, no later than three (3) months after the date of this Approval, prepare an Emergency Response Plan to prepare for dealing with spills, fires, process upsets, and other emergency situations that may occur at the Facility. The Emergency Response Plan shall include, but not necessarily be limited to:
 - a. a map of the Facility clearly showing the location of the Equipment;
 - b. emergency response procedures to be followed in the event of spills, fires, process upsets, equipment malfunctions, potential disruptions to the operation of the Equipment, and other emergency situations;

- c. a list of equipment and materials required for the implementation of the Emergency Response Plan;
- d. list of potentially hazardous, explosive or reactive materials that may pose a hazard in the event of a fire, spill or unintentional discharge.
- e. a list of personnel responsible for the implementation of the Emergency Response Plan and various emergency response tasks; and
- f. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Facility, 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 waste management companies available for emergency response.

2. The Company shall:

- a. submit the Emergency Response Plan to the local municipal authority, the local fire services authority and the District Manager; and
- b. ensure that the Emergency Response Plan is kept at the Facility at all times in a prominent location and be available to all personnel.
- 3. The Company shall, at least annually, review the Emergency Response Plan and update the plan if necessary. The Company shall ensure that:
 - a. any changes to the Emergency Response Plan are acceptable to the local municipal authority and to the local fire services authority prior to instituting the modifications;
 - b. within thirty (30) days of the changes to the Emergency Response Plan, the Company shall submit the updated Emergency Response Plan to the District Manager; and
 - c. all contact names and telephone numbers are up-to-date, and that these numbers are prominently displayed and immediately available to all staff and emergency response personnel.

8. ENVIRONMENTAL COMPLIANCE APPROVAL APPLICATION

1. The Company shall submit an application for review of the Approval by April 30, 2026 for the installation of sulphur dioxide emission control equipment that shall be operational by July 1, 2028.

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

- 1. Condition No. 1 and No. 6 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. 3 is included to require the Company to notify staff of the Ministry so as to assist the Ministry with the review of the site's compliance.
- 4. Condition No. 4 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.
- 5. Condition No. 5 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.
- 6. Condition No. 7 is included to require the Company to develop and implement emergency response procedures.
- 7. Condition No. 8 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 3854-8WPGKB issued on September 11, 2012

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;

and

- 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

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

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

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

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

DATED AT TORONTO this 28th day of May, 2024

Bijal Shah, P.Eng.

Director

appointed for the purposes of Part II.1 of the *Environmental*

Protection Act

MS/

c: District Manager, MECP Hamilton - District Erik Martinez, GHD Limited