

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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3170-BQEJCY Issue Date: July 30, 2020

Bella Biochar Corporation 322 Upper Ottawa Street Hamilton, Ontario

L8T 3S4

Site Location: 594676 County Road 59

City of Woodstock

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:

A pilot project for the production of biochar, consisting of the following processes and support units:

• one (1) Air Curtain Incinerator equipped with one (1) diesel engine burning Wood Waste at a maximum rate of 10 tonnes per hour;

all in accordance with the Environmental Compliance Approval Application submitted by Bella Biochar Corporation, dated January 27, 2020 and signed by Jodi Formosi; the supporting information, including the Emission Summary and Dispersion Modelling Report, submitted by RWDI Air Inc., dated January 24, 2020 and signed by Brad Bergeron; the Acoustic Assessment Report prepared by RWDI Air Inc., dated May 6, 2020 and signed by Brad Bergeron; and emails dated May 26, May 29 and June 25, 2020 from Brad Bergeron of RWDI Air Inc.

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

- 1. "Air Curtain Incinerator" means the ROI Carbonator 500 described in the Company 's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- 2. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above;

- 3. "Best Management Practices Plan" means the document titled "Best Management Practices Plan For Dust", dated January 21, 2020 and prepared by RWDI Air Inc., which describes measures to minimize dust emissions from the Facility;
- 4. "Certified Visible Emissions Observer" means a professional consultant who is certified in carrying out an opacity test in accordance with the protocols set forth in USEPA Method 9;
- 5. "Company" means Bella Biochar Corporation, that is responsible for the construction or operation of the Facility and includes any successors and assigns;
- 6. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- 7. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
- 8. "Equipment" means the Air Curtain Incinerator and ancillary equipment described in the Company 's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- 9. "Facility" means the entire operation located on the property where the Equipment is located;
- 10. "Manual" means a document or a set of documents that provide written instructions to staff of the *Company*;
- 11. "Method 9" means USEPA Test Method 9 Visual determination of the opacity of emissions from stationary sources (40CFR60);
- 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. "O. Reg. 347" means Regulation 347, R.R.O. 1990, General Waste Management, made under the EPA:
- 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;
- 15. "Sensitive Receptor" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from discharges from the *Plant* to the air, including one or a combination of:
 - a. private residences or public facilities where people sleep (e.g.: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.);
 - b. institutional facilities (e.g.: schools, churches, community centres, day care centres, recreational centres, etc.);

- c. outdoor public recreational areas (e.g.: trailer parks, play grounds, picnic areas, etc.); and
- d. other outdoor public areas where there are continuous human activities (e.g.: commercial plazas and office buildings).
- 16. "Shut-down" means the operating condition during which the combustion in the Air Curtain Incinerator is extinguished;
- 17. "Start-up" means the operating condition during which the Air Curtain Incinerator is charged with Wood Waste and combustion is initiated;
- 18. "USEPA" means the United States Environmental Protection Agency;
- 19. "Wood Waste" means Woodwaste as defined in O. Reg. 347 that is not contaminated with salt or leaded paints/coatings.

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. PERFORMANCE REQUIREMENTS

- 1. The Company shall only charge the Air Curtain Incinerator with Wood Waste.
- 2. The Company shall restrict the operation of the Air Curtain Incinerator to daylight hours.
- 3. The *Company* shall ensure a minimum separation distance of 100 metres between the *Air Curtain Incinerator* and the nearest *Sensitive Receptor*.
- 4. The *Company* shall ensure a minimum separation distance of 20 metres between the *Air Curtain Incinerator* and the nearest municipal road, provincial highway, pedestrian walkway, or forested area.

2. OPERATION AND MAINTENANCE

- 1. The *Company* shall ensure that the *Equipment* is properly operated and maintained at all times. The *Company* shall:
 - a. prepare, before commencement of operation of the *Equipment* at the site, 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 the *Equipment* suppliers;
- ii. frequency of inspections and scheduled preventative maintenance of the *Equipment*;
- iii. procedures to test, monitor, and record the opacity of the visual emissions from the *Air Curtain Incinerator*;
- iv. training procedures for person(s) operating the *Equipment*;
- v. procedures for the removal of ash from the Air Curtain Incinerator;
- vi. contingency measures to address emergency and upset conditions;
- vii. steps to be carried out to extinguish the combustion process;
- viii. all appropriate measures to minimize noise and fugitive dust emissions from all potential sources; and
 - ix. procedures to record and respond to environmental complaints.
- b. implement the recommendations of the *Manual*.
- 2. The *Company* shall not operate the *Air Curtain Incinerator* without on-site supervision by trained operators.
- 3. The *Company* shall operate the *Air Curtain Incinerator* in accordance with manufacturer specifications.
- 4. The *Company* shall not charge the *Air Curtain Incinerator* with *Wood Waste* such that it will impede the operation of the air curtain.
- 5. The *Company* shall only allow combustion to occur in the *Air Curtain Incinerator* when the air curtain is engaged, except during *Start-up* and *Shut-down*.

3. 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.

4. 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.

5. OPACITY

- 1. The *Company* shall ensure that visible emissions from the *Air Curtain Incinerator* does not exceed twenty (20) percent opacity averaged over six (6) minutes.
- 2. The *Company* shall, not later than forty-five (45) days after the start of operation of the *Air Curtain Incinerator*, complete an opacity test. The opacity test shall be conducted:
 - a. when the Air Curtain Incinerator is operating at the maximum capacity; and
 - b. in accordance with USEPA Method 9 using a Certified Visible Emissions Observer.
- 3. The *Company* shall, retain on-site, the results of the opacity test and make them available for review by staff of the *Ministry* upon request.

6. FUGITIVE DUST CONTROL

- 1. The Company shall,
 - a. implement the *Best Management Practices Plan* for the control of fugitive dust emissions resulting from the operation of the *Facility*;
 - b. review and update the *Best Management Practices Plan* as necessary or at the direction of the *District Manager*;
 - c. record the results of each review and update the *Best Management Practices Plan* within one (1) month of the completion of the review;

- d. maintain the updated *Best Management Practices Plan* at the *Facility* and provide a copy to the *District Manager* within one (1) month of the update; and
- e. implement, at all times, the most recent version of the Best Management Practices Plan.
- 2. The *Company* shall record, either electronically or in a log book, each time a specific preventative and control measure described in the *Best Management Practices Plan* is implemented. The *Company* shall record, as a minimum:
 - a. the date when each emission control measure is installed, including a description of the control measure;
 - b. the date when each new preventative measure or operating procedure to minimize emissions is implemented, including a description of the preventative measure or operating procedure; and
 - c. the date, time of commencement, and time of completion of each periodic activity conducted to minimize emissions, including a description of the preventative measure/procedure and the name of the individual performing the periodic activity.

7. NOISE

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*.

8. APPROVAL EXPIRY DATE

1. This *Approval* shall expire 365 days following the start date of the operation of the *Air Curtain Incinerator*.

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

- 1. Condition No. 1 is included to provide the minimum performance requirements considered necessary to prevent adverse effects resulting from the operation of the *Equipment*.
- 2. No. 2 is included to emphasize that the *Equipment* must be maintained and operated according to a procedure that will result in compliance with the *EPA*, the Regulations and this *Approval*.
- 3. Condition No. 3 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.
- 4. Condition No. 4 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.

- 5. Condition No. 5 is included to emphasize that the *Equipment* must be maintained and operated according to a procedure that will result in compliance with the *EPA*, the Regulations and this *Approval*.
- 6. Condition No. 6 is 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.
- 7. Condition No. 7 is included to provide the minimum performance requirements considered necessary to prevent adverse effects resulting from the operation of the *Facility*.
- 8. Condition No. 8 is included to require the *Company* to operate the *Facility* and complete the pilot project in accordance with the requirements of this *Approval* on or before the date specified in the condition.

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

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

The Notice should also include:

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

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

AND

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

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 Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

AND

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 30th day of July, 2020

Rudolf Wan, P.Eng.

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Director

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

BR/

c: District Manager, MECP London District Office Brad Bergeron, RWDI AIR Inc.