

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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 7580-BSMH7D Issue Date: September 28, 2020

Li-Cycle Corp. 2351 Royal Windsor Drive, Unit 10 Mississauga, Ontario L5J 4S7

Site Location: 158 Hagerman Avenue Kingston City, County of Frontenac

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) activated carbon adsorption unit for VOC removal, complete with a pre-filter section, used to control emissions from the process equipment (screens, tanks, shredder), containing approximately 4,000 kilograms of activated carbon, discharging to the air at a maximum volumetric flow rate of 2.12 cubic metres per second, having an exit diameter of 0.51 metre, extending 3.6 metres above the roof and 12.7 metres above grade; and
- one (1) dust collector serving the battery intake operations, having a maximum volumetric flow rate of 0.70 cubic metre per second, equipped with 16.4 square meters of filter material and an automatic bag shaker cleaning mechanism, exhausting and recirculating clean air to the plant, through a top mounted grille, having an exit area of 0.71 square meter and extending 1.72 meters above grade;

all in accordance with the Environmental Compliance Approval Application dated April 29, 2020 and signed by Tim Johnston, (Chairman and Co-Founder), Li-Cycle Corp., and all supporting information associated with the application including Emission Summary and Dispersion Modelling Report provided by Cambium Inc., dated April 24, 2020, and signed by Sadie Bachynski.

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

- "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present and proposed at the Facility. "Acoustic Assessment Report" also means the report prepared by Cambium Inc., dated September 3, 2020 and signed by Trevor Copeland, P.Eng.;
- 2. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the *Facility*, assessed to determine compliance with the performance limits for the *Facility* regarding noise emissions, completed in accordance with the procedures set in *Publication NPC-103* and reported in accordance with *Publication NPC-233*;
- 3. "*Acoustic Audit Report*" means a report presenting the results of an *Acoustic Audit*, prepared in accordance with *Publication NPC-233*;
- 4. "*Acoustical Consultant*" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with *Ministry* noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a *Facility*;
- 5. "*Activated Carbon Adsorption Unit*" means the activated carbon adsorption unit described in the *Company* 's application, this *Approval* and in the supporting documentation submitted with the application, to the extent approved by this *Approval*;
- 6. "*Approval*" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
- 7. "*Company*" means Li-Cycle Corp., that is responsible for the construction or operation of the *Facility* and includes any successors and assigns;
- 8. "*District Manager*" means the District Manager of the appropriate local district office of the *Ministry*, where the *Facility* is geographically located;
- 9. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
- 10. "*Equipment*" means the equipment and 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*;
- 11. "*Exhausted*" means the capacity of the *Activated Carbon Adsorption Unit* to adsorb contaminant emissions is reached, and the *Activated Carbon Adsorption Unit* is no longer able to effectively reduce emissions;
- 12. "Facility" means the entire operation located on the property where the Equipment is located;

- 13. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Acoustic Assessment Report or the design/implementation of Noise Control Measures for the Facility and/or Equipment. The Independent Acoustical Consultant shall not be retained by the Acoustical Consultant involved in the noise impact assessment or the design/implementation of Noise Control Measures for the Facility and/or Equipment;
- 14. "*Manual*" means a document or a set of documents that provide written instructions to staff of the *Company;*
- 15. "*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;
- 16. "*Noise Control Measures*" means measures to reduce the noise emission from the *Facility* including, but not limited to silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers, as outlined in the *Acoustic Assessment Report;*
- 17. "*Publication NPC-103*" means the Ministry Publication NPC-103 of the Model Municipal Noise Control By-Law, Final Report, August 1978, as amended;
- 18. "*Publication NPC-233*" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October 1995, as amended; and
- "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.

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

The *Company* shall ensure that:

- 1. the activated carbon in the Activated Carbon Adsorption Unit is replaced before it is Exhausted;
- 2. only one filter press blows down at any one time; and
- 3. 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 the *Equipment* suppliers;
 - ii. emergency procedures, including spill clean-up procedures;
 - iii. procedures for any record keeping activities relating to operation and maintenance of the *Equipment;*
 - iv. all appropriate measures to minimize noise and odorous emissions from all potential sources; and
 - v. the frequency of inspection and replacement of the activated carbon and filter material in the *Equipment;* and
- b. implement the recommendations of the Manual.

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. 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;* and
- 2. The *Company* shall keep the doors closed between the hours of 11 p.m. and 7 a.m.

5. ACOUSTIC AUDIT

- 1. The *Company* shall carry out *Acoustic Audit* measurements on the actual noise emissions due to the operation of the *Facility*. The *Company*:
 - a. shall carry out *Acoustic Audit* measurements in accordance with the procedures in *Publication NPC-103;*
 - b. shall submit an *Acoustic Audit Report* on the results of the *Acoustic Audit*, prepared by an *Independent Acoustical Consultant*, in accordance with the requirements of *Publication NPC-233*, to the *District Manager* and the *Director*, not later than twelve (12) months from the date of this *Approval*.
- 2. The *Director*:
 - a. may not accept the results of the *Acoustic Audit* if the requirements of *Publication NPC-233* were not followed;
 - b. may require the *Company* to repeat the *Acoustic Audit* if the results of the *Acoustic Audit* are found unacceptable to the *Director*.

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

- 1. Condition No. 1 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*.
- 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 gather accurate information and submit an *Acoustic Audit Report* in accordance with procedures set in the *Ministry's* noise guidelines, so that the environmental impact and subsequent compliance with this *Approval* can be verified.

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 <u>Environmental Bill of</u> <u>Rights, 1993</u>, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

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

The Notice should also include:

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

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

This Notice must be served upon:

The Secretary* Environmental Review Tribunal		The Minister of the Environment, Conservation and Parks		Part II.1 of the Environmental Protection Act Ministry of the Environment,
655 Bay Street, Suite 1500 Toronto, Ontario	AND	777 Bay Street, 5th Floor Toronto, Ontario	AND	Conservation and Parks 135 St. Clair Avenue West, 1st Floor
M5G 1E5		M7A 2J3		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.

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 September, 2020

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Rudolf Wan, P.Eng.

The Director appointed for the nurnoses of

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

AA/

c: District Manager, MECP Kingston District Office Sadie Bachynski, Cambium Inc.