

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0016-BTBK CJ

Issue Date: September 11, 2020

Airborn Flexible Circuits Inc.
11 Dohme Avenue
Toronto, Ontario
M4B 1Y7

Site Location: 11 Dohme Avenue
Toronto City
M4B 1Y7

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:

- one (1) baghouse type dust collector to control particulate emissions from the routing machines, having 7.9 square metres of Teflon coated felt, acrylic base filter bags and a hand bag shaker cleaning mechanism, discharging into the atmosphere at a maximum volumetric flow rate of 0.13 cubic metre per second through a stack, designated as Stack #39, having an exit diameter of 0.15 metre, extending 0.30 metre above the roof and 4.44 metres above grade;
- the Yellow Room Machine Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.24 cubic metre per second through a stack, designated as Stack #28, having an equivalent exit diameter of 0.17 metre, extending 0.79 metre above the roof and 4.96 metres above grade;
- the Chemical Cleaning Line Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.14 cubic metre per second through a stack, designated as Stack #25, having an exit diameter of 0.20 metre, extending 1.04 metres above the roof and 5.21 metres above grade;
- the Electroless Copper Line Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.30 cubic metre per second through a stack, designated as Stack #27, having an equivalent exit diameter of 0.24 metre, extending 1.27 metres above the roof and 5.44 metres above grade;

- the Develop Etch Machine Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.13 cubic metre per second through a stack, designated as Stack #30, having an equivalent exit diameter of 0.19 metre, extending 2.13 metres above the roof and 6.30 metres above grade;
- the Copper Electroplating Exhaust, discharging into the atmosphere through two (2) stacks, designated as Stack #10 and Stack #11, each having a maximum volumetric flow rate of 1.39 cubic metres per second, an exit diameter of 0.30 metre, extending 1.91 metres above the roof and 6.15 metres above grade;
- the Tin Lead Plating Line Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.78 cubic metre per second through a stack, designated as Stack #13, having an equivalent exit diameter of 0.25 metre, extending 1.22 metres above the roof and 5.46 metres above grade;
- the Copper Plating Line Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 2.89 cubic metres per second through a stack, designated as Stack #12, having an equivalent exit diameter of 0.46 metre, extending 2.92 metres above the roof and 7.16 metres above grade;
- the Silk Screening Room Machine Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 2.31 cubic metres per second through a stack, designated as Stack #35, having an exit diameter of 0.41 metre, extending 0.41 metre above the roof and 4.55 metres above grade;
- one (1) exhaust to serve the Wet Laboratory, complete with a fume hood, discharging into the atmosphere at a maximum volumetric flow rate of 0.052 cubic metre per second through a stack, designated as Stack #21, having an exit diameter of 0.18 metre, extending 1.04 metres above the roof and 3.83 metres above grade;
- one (1) exhaust to serve the Dry Laboratory, complete with a fume hood, discharging into the atmosphere at a maximum volumetric flow rate of 0.77 cubic metre per second through a stack, designated as Stack #22, having an exit diameter of 0.20 metre, extending 0.61 metre above the roof and 3.40 metres above grade;
- the Film Stripping Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.58 cubic metre per second through a stack, designated as Stack #23, having exit dimensions of 0.18 metre by 0.25 metre, extending 1.14 metres above the roof and 5.31 metres above grade;
- the Wet Process Oxide Machine Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.36 cubic metre per second through a stack, designated as Stack #24, having an equivalent exit diameter of 0.24 metre, extending 1.73 metres above the roof and 5.90 metres above grade;
- one (1) exhaust to serve a silk screen electric drying oven, discharging into the atmosphere passively through a stack, designated as Stack #37, having an exit diameter of 0.25 metre, extending 1.02 metres above the roof and 5.16 metres above grade;

- one (1) exhaust to serve a silk screen electric drying oven, discharging into the atmosphere passively through a stack, designated as Stack #38, having an exit diameter of 0.15 metre, extending 0.91 metre above the roof and 5.05 metres above grade;
- the Plasma Machine Exhaust, discharging into the atmosphere passively through a stack, designated as Stack #34, having an exit diameter of 0.05 metre, extending 3.30 metres above the roof and 7.44 metres above grade;
- the Assembly Soldering Station Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 3.21 cubic metres per second through a stack, designated as Stack #20, having an exit diameter of 0.30 metre, extending 0.41 metre above the roof and 3.20 metres above grade;
- the Assembly Reflow Oven Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 1.70 cubic metres per second through a stack, designated as Stack #19, having an exit diameter of 0.34 metre, extending 0.66 metre above the roof and 3.45 metres above grade;
- the Wave Soldering Machine Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.50 cubic metre per second through a stack, designated as Stack #18, having an exit diameter of 0.16 metre, extending 0.91 metre above the roof and 4.90 metres above grade;
- the Wet Process Developing Machine Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.10 cubic metre per second through a stack, designated as Stack #31, having an exit diameter of 0.16 metre, extending 2.13 metres above the roof and 6.30 metres above grade;
- the Reflow Oven/Ecobonding/Alcohol Cleaning Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 1.89 cubic metres per second through a stack, designated as Stack #47, having an exit diameter of 0.36 metre, extending 2.54 metres above the roof and 6.71 metres above grade;
- the Solder Mask Machine Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 0.61 cubic metre per second through a stack, designated as Stack #48, having an exit diameter of 0.15 metre, extending 2.44 metres above the roof and 6.61 metres above grade;
- the Electroless Nickel and Immersion Gold Line Exhaust, discharging into the atmosphere at a maximum volumetric flow rate of 1.65 cubic metres per second through a stack, designated as Stack #49, having an exit diameter of 0.30 metre, extending 3.10 metres above the roof and 7.27 metres above grade;
- the Press Room Curing Ovens, discharging into the atmosphere through a general room exhaust, at a maximum volumetric flow rate of 2.31 cubic metres per second through a stack, designated as Stack #32, having an exit diameter of 0.50 metre, extending 0.41 metre above the roof and 4.55 metres above grade;

- one (1) electric compressor, having a motor rated at 75 kilowatts, discharging into the atmosphere at a volumetric flow rate of 2.00 cubic metres per second through a stack, designated as Stack #4, having an exit diameter of 0.41 metre, extending 0.41 metre above the roof and 4.65 metres above grade;
- one (1) natural gas fired boiler, having a maximum heat input of 1,013,000 kilojoules per hour, discharging into the atmosphere through a stack, designated as Stack #8, having an exit diameter of 0.36 metre, extending 1.47 metres above the roof and 5.71 metres above grade;
- waste treatment tanks exhaust, designated as Stack #7;
- chemical storage room exhaust, designated as Stack #9;

all in accordance with the Application for Approval (Air & Noise) submitted by Airborn Flexible Circuits Inc., dated May 8, 2019 and signed by Peter Pialis, Director of Engineering; and the supporting information, including the Emission Summary and Dispersion Modelling Report, submitted by BluMetric Environmental Inc., dated May 9, 2019, and signed by Jessica Petrocco; and the Acoustic Assessment Report prepared by Aercoustics Engineering Limited, dated October 22, 2019 and signed by Christopher Bosyj, P.Eng.

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

1. *"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 at the *Facility*. *"Acoustic Assessment Report"* also means the Acoustic Assessment Report prepared by Aercoustics Engineering Limited, dated October 22, 2019 and signed by Christopher Bosyi, P.Eng.;
2. *"Approval"* means this Environmental Compliance Approval, including the application and supporting documentation listed above;
3. *"Company"* means Airborn Flexible Circuits Inc., that is responsible for the construction or operation of the *Facility* and includes any successors and assigns;
4. *"District Manager"* means the District Manager of the appropriate local district office of the *Ministry*, where the *Facility* is geographically located;
5. *"EPA"* means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
6. *"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*;
7. *"Facility"* means the entire operation located on the property where the *Equipment* is located;

8. "*Manual*" means a document or a set of documents that provide written instructions to staff of the *Company*;
9. "*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;
10. "*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. It also means the noise control measures outlined in the *Acoustic Assessment Report*;
11. "*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
12. "*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

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 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 filter material in the *Equipment*;
- 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:
 - a. at all times, ensure that the noise emissions from the *Facility* comply with the limits set in *Ministry Publication NPC-300*; and
 - b. ensure that the *Noise Control Measures* are properly maintained and continue to provide the acoustical performance outlined in the *Acoustic Assessment Report*.

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*.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 5875-8A2KKF issued on November 10, 2010.

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.

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

The Notice should also include:

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

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

This Notice must be served upon:

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

AND

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

AND

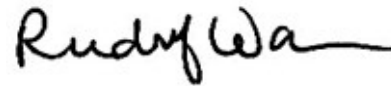
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor

*** 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**

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 11th day of September, 2020



Rudolf Wan, P.Eng.

Director

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

AB/

c: District Manager, MECP Toronto - District
Jessica Petrocco, BluMetric Environmental Inc.