

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0557-BDVQN3

Issue Date: August 22, 2019

Regency Plastics Company Limited
50 Brisbane Road
Toronto, Ontario
M3J 2K2

Site Location: 50 Brisbane Road
Toronto City
M3J 2K2

*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) rooftop general exhausts (identified as GE1 and GE2), each discharging to air at a volumetric flow rate of 5.1 cubic metres per second, through individual vertical stacks having an exit diameter of 0.76 metre, and extending 1.0 metre above the roof and 6.0 metres above grade, serving:
 - fugitive emissions from extrusion operations comprised of eleven (11) extruders;
 - fugitive emissions from printing operations;
- one (1) rooftop exhaust (identified as EX12) serving the pelletizer extruder, discharging to air at a volumetric flow rate of 0.5 cubic metre per second, through a vertical stack having an exit diameter of 0.14 metre, and extending 1.0 metre above the roof and 6.0 metres above grade;
- one (1) rooftop exhaust (identified as CORONA) serving eight (8) corona treatment units, discharging to air at a volumetric flow rate of 0.57 cubic metre per second, through a vertical stack having an exit diameter of 0.34 metre, extending 0.3 metre above the roof and 5.3 metres above grade;
- one (1) process cooling tower, equipped with a drift eliminator, operating at a maximum water flow rate of 1,703 litres per minute;
- six (6) high-pressure natural gas-fired ICHP Capstone C65 microturbine generators, used for electricity generation, each having a maximum power rating of 65 kilowatts of electrical output, each discharging to air at a volumetric flow rate of 0.8 cubic metre per second, through vertical stacks having an exit diameter of 0.25 metre and extending 2.54 metres above grade;

all in accordance with the Application for Approval (Air & Noise) dated February 15, 2019 signed by Abraham d'Ancona, Owner, and all supporting information associated

with the application, including an Emission Summary and Dispersion Modelling report prepared by Novus Environmental Inc., dated February 14, 2019; additional information provided via email by Stephanie Seebach / Novus Environmental Inc. and dated July 5, 2019 and July 17, 2019; the Primary Noise Screening Method prepared by Novus Environmental Inc., dated January 28, 2019 and signed by Marcus Li, Specialist - Acoustics, Noise and Vibration; additional information provided via email by Marcus Li / Novus Environmental Inc. and dated May 22, 2019 and May 24, 2019; and all other documentation associated with the application.

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

1. "*Approval*" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
2. "*Company*" means Regency Plastics Company Limited, that is responsible for the construction or operation of the *Facility* and includes any successors and assigns;
3. "*District Manager*" means the District Manager of the appropriate local district office of the *Ministry*, where the *Facility* is geographically located;
4. "*EPA*" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended ;
5. "*Equipment*" means the *Microturbines* and all other 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*;
6. "*Facility*" means the entire operation located on the property where the *Equipment* is located;
7. "*Fuel Flow Rate*" means the flow rate of the fuel, expressed in cubic metres per second at standard temperature and pressure, or kilograms per second;
8. "*Heat Output*" means the total useful heat energy recovered from the *Microturbines* as heat, expressed in megawatts;
9. "*Lower Heating Value*" means the energy released during combustion of the fuel, excluding the latent heat content of the water vapour component of the products of combustion, expressed in megajoules per cubic metre at standard temperature and pressure, or megajoules per kilogram;
10. "*Manual*" means a document or a set of documents that provide written instructions to staff of the *Company*;
11. "*Microturbines*" means the high pressure natural gas-fired ICHP Capstone C65 65

kilowatt microturbines described in the *Company's* application, this *Approval* and in the supporting documentation submitted with the application, to the extent approved by this *Approval*;

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. "*Nitrogen Oxides*" means oxides of nitrogen, including nitric oxide (NO) and nitrogen dioxide (NO₂);
14. "*Power Output*" means the electricity and shaft power production of the *Microturbines*, expressed in megawatts;
15. "*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;
16. "*Thermal Efficiency*" means the thermal efficiency of the *Microturbines* calculated according to the formula described in Schedule B attached to this *Approval*.

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 ensure, that the noise emissions from the *Facility* comply at all times with the limits set in *Ministry Publication NPC-300*.
2. The *Company* shall ensure that the *Microturbines* are designed and operated to comply, at all times, with the following performance requirements:
 - a. The concentrations of nitrogen oxides and carbon monoxide in the undiluted flue gas leaving the *Microturbines* is not greater than the limits specified in Schedule A of this *Approval*.
 - b. The *Thermal Efficiency* of the *Microturbines* is not less than the efficiency specified in Schedule A of this *Approval*.

2. EMISSION MONITORING

1. For the *Microturbines*, the *Company* shall determine the rate of emissions of nitrogen oxides and carbon monoxide, using portable monitors, when the *Microturbines* are operating at maximum rating or at maximum load achievable at the time of the monitoring, within three (3) months after commencement of operation of the *Microturbines*.

2. The *Company* shall submit a report on the *Microturbines* emission monitoring to the *District Manager* not later than three (3) months after completing the emission monitoring. The report shall include, as a minimum:
 - a. an executive summary;
 - b. date, time and results of the emission monitoring and the loading of the *Microturbines* at the time of emission monitoring;
 - c. specifications of the portable monitors used in the emission monitoring; and
 - d. emission concentrations of nitrogen oxides and carbon monoxide (in ppmv at 15% O₂) obtained in the emission monitoring of the *Microturbines*.

3. 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*, or as otherwise indicated by the *District Manager*, 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;
 - 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. The *Company* shall perform a test, when the emission monitoring of the *Microturbines* is conducted, to determine the *Thermal Efficiency* of the *Microturbines*. The *Company* shall:
 - a. determine, as a minimum, the parameters described in Schedule B of this *Approval*, during the *Thermal Efficiency* testing for the *Microturbines*;
 - b. calculate the *Thermal Efficiency* of the *Microturbines* according to the

formula described in Schedule B of this *Approval*;

- c. prepare a summary on the results of the *Thermal Efficiency* testing no later than three (3) months after completing the test. The summary shall indicate the *Thermal Efficiency* of the *Microturbines* and include all parameters described in Schedule B of this *Approval*;
- d. if the measured *Thermal Efficiency* is less than the anticipated *Thermal Efficiency* specified in Schedule B of this *Approval* (with a tolerance of 0.05 multiplied by the anticipated *Thermal Efficiency*), notify the *Ministry* so that the concentration limits specified in Schedule A of this *Approval* could be revised accordingly.

3. The *Company* shall ensure that no more than two (2) corona treatment units are in operation at any given time at the *Facility*.

4. 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.

5. 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.

SCHEDULE A

PARAMETER	LIMIT
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Nitrogen Oxides	40 ppmv ¹
Carbon Monoxide	60 ppmv ¹
Thermal Efficiency	70 percent

1. "ppmv" means parts per million by volume at Reference Conditions (ambient temperature at 15 degrees Celsius, 60 percent relative humidity and 101.3 kiloPascals barometric pressure) on a dry volume basis normalized to 15 percent oxygen.

SCHEDULE B

PARAMETERS:

1. Power Output
2. Heat Output
3. Fuel Flow Rate
4. Lower Heating Value
5. Meteorological Parameters:
 - a. ambient air temperature (expressed in degree of Celsius)
 - b. barometric pressure (expressed in kilopascal)
 - c. relative humidity (expressed in percent)
6. Date, time and duration of test.

FORMULA:

**(Power
Output
+**

Heat
Output)
x
100%

Thermal Efficiency = -----

Fuel
Flow
Rate
x
Lower
Heating
Value

NOTE:

Thermal Efficiency testing should be conducted, for the *Microturbines*, at maximum rating or at the maximum load achievable at the time of testing and shall employ an averaging time of not less than three (3) hours.

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 an adverse effect resulting from the operation of the *Facility*.

2. Condition No. 2 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.
3. Condition No. 3 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*.
4. Condition No. 4 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.
5. Condition No. 5 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.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 5267-7LSKJ6 issued on December 2, 2008

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 M5G 1E5	AND	The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3	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
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*** 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 www.ebr.gov.on.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 22nd day of August,
2019

Jeffrey McKerrall, P.Eng.
Director
appointed for the purposes of Part
II.1 of the *Environmental
Protection Act*

HD/
c: District Manager, MECP Toronto - District
Stephanie Seebach, Novus Environmental Inc.