



DEPARTMENT ORDER

**Lignetics of Maine, LLC  
Franklin County  
Strong, Maine  
A-342-71-X-M (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #2**

**FINDINGS OF FACT**

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

**I. REGISTRATION**

**A. Introduction**

Geneva Wood Fuels, LLC was issued Air Emission License A-342-71-T-R/A on July 8, 2013 permitting the operation of emission sources associated with their wood pellet manufacturing facility. The license was subsequently transferred to GF Funding LLC on December 9, 2014 (A-342-71-U-T) and then to Lignetics of Maine, LLC (Lignetics) on November 6, 2015 (A-342-71-V-T). The license was amended on November 6, 2015 (A-342-71-W-M).

Lignetics has requested a minor revision to their license in order to install a blend air duct that may also function as a bypass stack.

The equipment addressed in this license amendment is located at 30 Norton Hill Road in Strong, Maine.

**B. Emission Equipment**

The following equipment is addressed in this air emission license amendment:

<b>Equipment</b>	<b>Maximum Capacity (MMBtu/hr)</b>	<b>Maximum Firing Rate</b>	<b>Fuel Type</b>	<b>Date of Manuf.</b>	<b>Pollution Control Equipment</b>
Dryer & Burner	40	9073 lb/hr	wood (50% moisture)	2010	Multi-cyclone

C. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

This amendment will not increase emissions of any pollutant. Therefore, this amendment is determined to be a minor revision and has been processed as such.

II. **BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Revision Description

Lignetics dries wood in a rotary drum dryer (Dryer #1) heated by direct contact with exhaust from a wood-fired burner (Burner #1). Currently, exhaust from Burner #1 is mixed with recycled exhaust from Dryer #1 to attain the desired dryer gas temperature. However, in order to control emissions of NO<sub>x</sub> and CO, Burner #1 is required to maintain a combustion temperature between 1600°F – 1850°F.

At these temperatures, recycle gas is not sufficiently cool enough to effectively modulate the temperature inside the dryer. This results in the wood in the dryer being over-dried, particularly during warmer months. Over-drying the wood causes problems pelletizing the wood as well as a potential fire hazard.

Lignetics has proposed the installation of a “Tee” where the combustion gases exit Burner #1 which would allow the facility to introduce and blend ambient air with the burner exhaust before contacting it with the wood in the dryer. In addition to allowing Lignetics to temper the gas sent to Dryer #1, this installation would also serve as a bypass stack in the event of an upset condition or emergency shutdown. The bypass stack would allow for quick and safe evacuation of the system.

The Department has determined that use of a blend air duct/bypass stack will not increase emissions of any regulated air pollutant. BACT for use of the bypass stack is determined to be limiting its use to periods of startup, shutdown, or malfunction not to exceed one

in duration. Records shall be kept including the date, time, duration, cause, method utilized to minimize duration of the event and/or to prevent reoccurrence, and whether the bypass stack was utilized and for how long.

C. Annual Emissions

This amendment does not change any licensed annual emissions from Lignetics.

**ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-342-71-X-M subject to the conditions found in Air Emission License A-342-71-T-R/A, in transfers A-342-71-U-T and A-342-71-V-T, in amendment A-342-71-W-M, and the following conditions.

Severability. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

**Condition (17)(H) of Air Emission License A-342-71-T-R/A is Deleted and Replaced with the following:**

(17) **Dryer**

H. Periods of Startup, Shutdown, and Malfunction

1. During periods of startup, shutdown, or malfunction, the bypass stack may be used for Burner #1 for no more than one hour for any event.  
[06-096 C.M.R. ch. 115, BACT]
2. Records shall be maintained documenting startups, shutdowns, and malfunctions. These records shall include date, time, duration, cause, method utilized to minimize duration of the event and/or to prevent reoccurrence, and whether the bypass stack was utilized and for how long. [06-096 C.M.R. ch. 115, BACT]

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**Condition (17)(J) of Air Emission License A-342-71-T-R/A is Deleted and Replaced with the following:**

**(17) Dryer**

J. Burner #1 shall exhaust through Dryer #1. A portion of the exhaust of Dryer #1 may be recycled back into the system. Any exhaust not recycled shall be vented through the dryer multi-cyclone and exit through a 96-foot above ground level stack except for periods of startup, shutdown, or malfunction. [06-096 C.M.R. ch. 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 6 DAY OF September, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Core for  
PAUL MERCER, COMMISSIONER

**The term of this amendment shall be concurrent with the term of Air Emission License A-342-71-T-R/A.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/25/17

Date of application acceptance: 8/28/17

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

