

#### STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

#### DEPARTMENT ORDER

Maine Woods Pellet Company, LLC, Athens Capital Holdings, LLC & Athens Energy LLC Somerset County Athens, Maine A-989-77-7-M Departmental Findings of Fact and Order New Source Review NSR #7

# **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 (the Department) finds the following facts:

## I. <u>REGISTRATION</u>

## A. Introduction

FACILITY	Maine Woods Pellet Company, LLC, Athens Capital Holdings, LLC & Athens Energy LLC	
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Revision	
NAICS CODES	321219	
NATURE OF BUSINESS	Wood Pellet Manufacturer	
FACILITY LOCATION	164 Harmony Road, Athens, Maine	

## B. <u>NSR License Description</u>

Maine Woods Pellet Company, LLC (MWP), along with co-applicants Athens Capital Holdings, LLC and Athens Energy LLC, previously licensed the installation and operation of a wood pellet processing operation consisting of a biomass-fired cogeneration facility, wood drying equipment, and additional pellet processing equipment.

MWP has requested a revision to their existing New Source Review (NSR) licenses to more accurately describe the particulate matter control equipment associated with Pre-Dryer #1.

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C. Emission Equipment

The following equipment is addressed in this NSR license:

#### Furnace

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Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (ton/hr)	Fuel Type, % sulfur	Date of Manuf.	Stack #
Furnace #1	149	16.6	biomass, negligible	2015	3

## **Wood Drying Equipment**

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Production Rate (ODT/hr)	Fuel Type	Install. Date	Stack #
Pre-Dryer #1	N/A	6.5	N/A	2015	3

## D. <u>Revision Description</u>

MWP operates a cogeneration facility consisting of a 149 MMBtu/hr biomass-fired furnace (Furnace #1) and a direct-contact rotary drum dryer (Pre-Dryer #1).

Exhaust gases from Furnace #1 pass through a dry electrostatic precipitator (ESP) to remove particulate matter prior to entering a directly connected rotary drum dryer (Pre-Dryer #1). Waste heat in the combustion exhaust gas from Furnace #1 may be utilized by Pre-Dryer #1 to dry wood for use in the pelletizing process. The moisture-laden exhaust from Pre-Dryer #1 then passes through multicyclones to remove particulate matter that may become entrained in the exhaust gases during the drying process. Furnace #1 may also operate without drying wood in Pre-Dryer #1. In such cases, the emissions from Furnace #1 are controlled only by the ESP and may bypass the multicyclones.

Between Pre-Dryer #1 and the multicyclones, there is a process unit that previously has been mislabeled as a cyclone. In reality, it is simply an expansion in the ductwork which slows the velocity of the air and allows the dried wood to drop out of the air stream (i.e., a dropbox). This unit does not operate as a cyclone as there is no cyclonic action used to separate the wood from the air stream. MWP has requested that references to this "cyclone" in MWP's licenses be corrected to "dropbox" to more accurately describe the equipment on-site. The Department agrees with this request. This change does not affect the Best Available Control Technology (BACT) analysis performed for this equipment as there will Maine Woods Pellet Company, LLC, Athens Capital Holdings, LLC & Athens Energy LLC Somerset County Athens, Maine A-989-77-7-M

be no change in licensed emission limits, and MWP previously demonstrated compliance with the particulate matter emission limits using the control equipment in the configuration described above through compliance testing performed the week of May 22, 2017.

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## E. 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.

The application submitted by MWP does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements.

The proposed revision will not change the facility's emission limits. Therefore, the NSR license is determined to be a minor revision under *Minor and Major Source Air Emission License Regulations* 06-096 Code of Maine Rules (C.M.R.) ch. 115. The procedures found in 06-096 C.M.R. ch. 115 can be utilized to process this application since the proposed revision is not prohibited by the Part 70 air emission license. An application to incorporate the requirements of this NSR license into the Part 70 air emission license has been submitted to the Department.

## F. Annual Emissions

This license amendment will not change the facility's licensed annual emissions.

# II. AMBIENT AIR QUALITY ANALYSIS

MWP previously submitted an ambient air quality analysis demonstrating that emissions from the facility (A-989-71-E-A), in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this NSR license amendment.

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The Department hereby grants New Source Review Minor Revision A-989-77-7-M pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the specific conditions below.

<u>Severability</u>. 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.

## **SPECIFIC CONDITIONS**

The following shall replace Condition (22)(D)(2) of Air Emission License A-989-77-5-A.

- (22) Furnace #1 and Pre-Dryer #1
  - D. Control Equipment
    - Emissions of PM/PM<sub>10</sub>/PM<sub>2.5</sub> from Pre-Dryer #1 shall be controlled by the operation and maintenance of a dropbox and multicyclone. [06-096 C.M.R. ch. 115, BACT]