



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID P. LITTELL  
COMMISSIONER

**S.D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-77-2-M**

**Departmental  
Findings of Fact and Order  
New Source Review  
Amendment #2**

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

A. Introduction

FACILITY	S.D. Warren Company
PART 70 LICENSE NUMBER	A-29-70-A-I
LICENSE TYPE	Chapter 115 Minor Revision
NAICS CODES	322121
NATURE OF BUSINESS	Paper Mill
FACILITY LOCATION	Westbrook, Maine
PART 70 LICENSE ISSUANCE DATE	December 31, 2003
NSR AMENDMENT ISSUANCE DATE	April 15, 2010
PART 70 LICENSE EXPIRATION DATE	December 31, 2008

B. Amendment Description

S.D. Warren Company (S.D. Warren) of Westbrook, Maine has requested a minor revision under *Major and Minor Source Air Emission License Regulations, 06-096 CMR 115* (last amended December 24, 2005), to replace the natural gas fired burner in the 7<sup>th</sup> Zone Dryer on the #20 Coater. Specifically, S.D. Warren seeks to replace the existing natural gas fired burner having a design heat input capacity of 2.5 MMBtu/hr with a slightly larger natural gas fired burner having a design heat input capacity of 4 MMBtu/hr. The purpose of this project is to reduce the amount of time to get the 7<sup>th</sup> Zone Dryer up to temperature thus reducing the amount of time that sub-quality coated paper is being produced on the #20 Coater.

C. Emission Equipment

The following equipment is addressed in this air emission license:

**Fuel Burning Equipment**

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (scf/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
7 <sup>th</sup> Zone Dryer on the #20 Coater	4	4,000*	Natural gas; negligible sulfur content	**

\* Based on a higher heating value of 1,000 Btu/scf for natural gas

\*\* When coatings of a VOC content requiring operation of the catalytic incinerator are being used on the #20 Coater, emissions exhaust through the incinerator stack; otherwise emissions exhaust through a bypass stack.

D. Application Classification

This air emission license amendment addresses the replacement of a small natural gas fired burner with a slightly larger natural gas fired burner in the 7<sup>th</sup> Zone Dryer on the #20 Coater. The project will not cause an increase in the production capacity of the #20 Coater and is unlikely to cause an increase in actual emissions from the #20 Coater. The project constitutes a potential increase in emissions of less than 4 tons/year for each single pollutant and less than 8 tons/year for all pollutants combined.

Therefore, this amendment is determined to be a minor revision under *Major and Minor Source Air Emission License Regulations* 06-096 CMR 115 (last amended December 24, 2005). This amendment will be incorporated into the Part 70 air emission license no later than 12 months from commencement of the requested operation.

**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 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

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

B. 7<sup>th</sup> Zone Dryer on the #20 Coater

The 7<sup>th</sup> Zone Dryer on the #20 Coater contains a small (4 MMBtu/hr design heat input capacity) natural gas fired burner that provides the heat needed to dry the paper coatings being used on the #20 Coater.

The Department has determined that BACT for the 7<sup>th</sup> Zone Dryer is the following:

1. The burner shall fire natural gas.
2. 06-096 CMR 106 regulates fuel sulfur content, however the BACT analysis determined that the SO<sub>2</sub> emission factor for small natural gas fired boilers contained in AP-42, dated 7/98 is more appropriate.
3. 06-096 CMR 103 regulates PM emissions, however the BACT analysis determined that the PM emission factor for small natural gas fired boilers contained in AP-42, dated 7/98 is more appropriate. The PM<sub>10</sub> emission limit is derived from the PM emission limit.
4. NO<sub>x</sub>, CO, and VOC emission limits are based on emission factor data for small natural gas fired boilers contained in AP-42, dated 7/98.
5. Visible emissions from the 7<sup>th</sup> Zone Dryer shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.

C. Incorporation into the Part 70 Air Emission License

The requirements in this 06-096 CMR 115 New Source Review amendment shall apply to the facility upon amendment issuance. Per *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (last amended December 24, 2005), Section 2(J)(2)(d), for a modification that has undergone NSR requirements or been processed through 06-096 CMR 115, the source must then apply for an amendment to the Part 70 license within one year of commencing the proposed operations as provided in 40 CFR Part 70.5.

D. Annual Emissions

The proposed changes will result in no changes to any of the annual emission limits currently contained in S.D. Warren's Air Emission Licenses, including any amendments.

### III. AMBIENT AIR QUALITY ANALYSIS

S.D. Warren previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this amendment.

### ORDER

The Department hereby grants Air Emission License Minor Revision A-29-77-2-M pursuant to the preconstruction licensing requirements of 06-096 CMR 115 and subject to the specific conditions listed below.

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

### SPECIFIC CONDITIONS

(1) **7<sup>th</sup> Zone Dryer on the #20 Coater**

- A. The burner shall fire natural gas. [06-096 CMR 115, BACT]
- B. Emissions from fuel burning in the 7<sup>th</sup> Zone Dryer shall not exceed the following:

<b>Emission Unit</b>	<b>PM (lb/hr)</b>	<b>PM<sub>10</sub> (lb/hr)</b>	<b>SO<sub>2</sub> (lb/hr)</b>	<b>NO<sub>x</sub> (lb/hr)</b>	<b>CO (lb/hr)</b>	<b>VOC (lb/hr)</b>
Burner	0.03	0.03	0.003	0.40	0.3	0.02

[06-096 CMR 115, BACT]

S.D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-77-2-M

5

Departmental  
Findings of Fact and Order  
New Source Review  
Amendment #2

- C. Visible emissions from the 7<sup>th</sup> Zone Dryer shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.

[06-096 CMR 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS *15<sup>th</sup>* DAY OF *April*, 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *James P. Brooks*  
\_\_\_\_\_  
DAVID P. LITTLE, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 15, 2010

Date of application acceptance: March 25, 2010

Date filed with the Board of Environmental Protection:

This Order prepared by Eric Kennedy, Bureau of Air Quality.

