



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**S.D. Warren Company
Somerset County
Skowhegan, Maine
A-19-77-8-M**

**Departmental
Findings of Fact and Order
New Source Review
NSR #8**

FINDINGS OF FACT

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 Maine Revised Statutes Annotated (M.R.S.A.), Section 344 and Section 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	S. D. Warren Company
LICENSE TYPE	06-096 CMR 115, Minor Revision
NAICS CODES	322121
NATURE OF BUSINESS	Pulp and Paper Mill
FACILITY LOCATION	1329 Waterville Road, U.S. Route 201 Skowhegan, Maine

B. Amendment Description

S.D. Warren Company (SDW) has requested a minor revision in order to address the operation of the No. 2 Power Boiler electrostatic precipitator (ESP) while firing natural gas, to clarify the bag house filter arrangement for the Lime Kiln Lime Silos, and to address insignificant activities associated with the operation of the natural gas pipeline safety vents.

C. Application Classification

The application submitted by SDW does not violate any applicable federal or state requirements, does not reduce monitoring, reporting, testing or record keeping, and does not seek to modify a Best Available Control Technology (BACT) analysis.

The proposed revision will not change the facility's emission limits or will not result in an emissions increase of greater than 4 tons/year of a single pollutant or 8 tons/year total pollutants. Therefore, the amendment is determined to be a minor revision under *Minor and Major Source Air Emission License Regulations* 06-096 Code of Maine Rules (CMR) 115 (as amended). The procedures found in 06-096 CMR 115 (as amended) can be utilized to process this application since the proposed revision not prohibited by the Part 70 air emission license.

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 (as amended). 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.

Process Description

B. No. 2 Power Boiler

On June 1, 2012, S.D. Warren was issued a New Source Review Minor Modification Air Emission License A-19-77-6-A which licensed the use of natural gas in the No. 2 Power Boiler. Review of the safety protocols and procedures involved with natural gas firing has prompted SDW to submit this request to clarify that the No. 2 Power Boiler ESP is not required to be operated while natural gas is the only fuel being fired in the No. 2 Power Boiler. This would also include the provision to allow the immediate shutdown of the ESP when a boiler trip, caused by a sudden loss of natural gas and/or liquid fuel, is initiated by the Burner Management System (BMS). The BMS will not shutdown the ESP, if the BMS confirms solid fuel is burning in the boiler.

Natural gas firing results in low particulate emissions as calculated by using emission factors found in AP-42 Section 1.4.3 and AP-42 does not list the use of ESP's as a particulate control approach. In addition EPA's National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial,

Commercial, and Institutional Boilers and Process Heaters regulation does not require the operation of ESPs for the natural gas boiler category nor does the Department typically require the use and operation of ESPs in natural gas boilers as BACT.

To safeguard the No. 2 Power Boiler ESP, uncombusted fuel must not be carried out of the combustion zone into the ESP where it could potentially be ignited inside the ESP causing physical damage to the boiler and/or the ESP and potential injury to employees. The BMS was put into place to prevent this occurrence.

Therefore, the Department approves SDW's request to clarify that the ESP be shut off during periods of only natural gas firing and that the ESP may be shut down when a boiler trip initiates the Burner Management System (BMS) safety protocols and procedures.

C. Lime Kiln Lime Silos

On July 8, 2013, S.D. Warren Company was issued a New Source Review Minor Modification Air Emission License A-19-77-7-A which permitted the use of natural gas in the Lime Kiln. The project also involved the installation of a new Purchased Lime Silo and the installation of a new baghouse filter on the existing No. 2 Reburnt Lime Silo (North Silo). SDW wishes to clarify the new bag house filter will be installed on the No. 2 Reburnt Lime Silo with a new Purchased Lime silo connected and vented through the No. 2 Reburnt Lime Silo filter. The new bag house filter will be installed on top of the No. 2 Reburnt Lime Silo and will be designed to handle exhaust from both the existing No. 2 Reburnt Lime Silo and new Purchased Lime Silo.

D. Natural Gas Pipeline

The natural gas line is equipped with several natural gas safety vents required by natural gas pipeline safety codes. The vents allow pressure to be released as necessary if the line over pressurizes. SDW has requested that these ventings be considered as insignificant activities. The Department agrees that these are insignificant since they are substantially equivalent to the insignificant activities specified in 06-096 CMR 115 Section 1B Appendix B.

E. 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 (as amended), Section 1(C)(8), 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. This minor revision shall be incorporated into the Part 70 air emission license renewal currently in process.

ORDER

The Department hereby grants Air Emission License Minor Revision A-19-77-8-M pursuant to the preconstruction licensing requirements of 06-096 CMR 115 and subject to the standard and special conditions 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

The following condition shall be added to condition (1) in A-19-77-6-A

(1) No. 2 Power Boiler

E. Notwithstanding Condition 17(O) of License A-19-70-A-I, SDW is not required to operate the ESP during periods of natural gas firing only or during boiler trips triggered by BMS safety protocols resulting in the shutdown of the ESP. However, SDW shall not be relieved of its obligation to meet its licensed opacity and PM limits.

The following condition shall replace condition (2) in A-19-77-7-A

(2) New Purchased Lime Silo

SDW shall vent the exhaust from the New Purchased Lime Silo through the New No. 2 Reburnt Lime Silo baghouse.

S.D. Warren Company
Somerset County
Skowhegan, Maine
A-19-77-8-M

5

Departmental
Findings of Fact and Order
New Source Review
NSR #8

The following shall be a new condition

- (1) SDW shall submit an application to incorporate this amendment into the Part 70 air emission license no later than 12 months from commencement of the requested operation. [06-096 CMR 140, Section 1(C)(8)]

DONE AND DATED IN AUGUSTA, MAINE THIS 7 DAY OF May, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Come for
PATRICIA W. AHO, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: January 30, 2014

Date of application acceptance: January 30, 2014

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

