

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

DEPARTMENT ORDER

ND OTM LLC Penobscot County Old Town, Maine A-180-77-13-A Departmental Findings of Fact and Order New Source Review NSR #13

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	ND OTM LLC
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	322110 Wood Pulp Manufacturing
NATURE OF BUSINESS	Pulp Manufacturing
FACILITY LOCATION	24 Portland Street, Old Town, Maine

B. NSR License Amendment Description

ND OTM LLC (ND OTM, The Mill) has requested a New Source Review (NSR) license amendment to extend the compliance schedule for the carbon monoxide (CO) emission limit on the Biomass Boiler.

C. Emission Equipment

The following equipment is addressed in this NSR license:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Fuel Type, % sulfur
Diamaga Dailan	265.2	Biomass, negligible
Biomass Boiler	265.2	Natural gas, negligible

D. Definitions

<u>Biomass</u> means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue; wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.*, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition also includes wood chips and processed pellets made from wood or other forest residues. Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. ND OTM should consult with the Department before adding any new biomass type to its fuel mix.

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E. <u>Application Classification</u>

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 ND OTM does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements.

The proposed license amendment will not change the facility's emission limits, just the date by which a previously established CO emission limit for the Biomass Boiler becomes effective. This NSR license is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115. An application to incorporate the requirements of this NSR license into the Part 70 air emission license shall be submitted no later than 12 months from commencement of operations associated with this project.

II. <u>NSR LICENSE AMENDMENT</u>

A. Introduction

This NSR license amendment extends the compliance schedule for a previously established CO emission limit associated with the Biomass Boiler.

B. Biomass Boiler CO Emission Limit Compliance Schedule

NSR License A-180-77-4-A was issued to Red Shield Acquisition, LLC, the owner of the Old Town Mill at the time, on October 12, 2012. This license established a CO emission limit for the Biomass Boiler of 0.45 lb/MMBtu and provided approximately 38 months for the mill to demonstrate compliance with this limit per 06-096 C.M.R. ch. 115, BPT. Expera Old Town, LLC acquired the mill in late 2014, and invested in bringing the Biomass Boiler

into compliance with the CO limit. Expera requested a similar 38-month extension as that granted to Red Shield, extending the compliance schedule from January 2016 to March 2019.

Mill operation was suspended in September of 2015, and the Mill was acquired by ND OTM on October 19, 2018. ND OTM was issued NSR Air Emission License A-180-77-9-A on April 24, 2019, which further extended the CO emission limit compliance date for the Biomass Boiler to November 1, 2020. ND OTM has identified and undertaken repair and maintenance work that had been deferred by previous owners, including repairs and upgrades to the ESP, ash handling system, fuel handling system, fuel distribution and combustion systems, mechanical dust collectors, and air heater. ND OTM submitted documentation to the Department demonstrating that the total cost of the components is significantly less than 50% of the cost of a comparable new unit and therefore does not constitute reconstruction. ND OTM also documented that the work does not constitute a modification because it is either routine maintenance, repair, and replacement; or a physical change that does not result in an emission increase of any regulated pollutant. This work is expected to be completed by early November 2020.

The steam demand at The Mill at current production rates is not sufficient to support the operation of the Biomass Boiler concurrently with the #4 Recovery Boiler. The associated turbine generator provides a baseload steam demand and absorbs normal operational swings in steam demand that supplements the operation of the Biomass Boiler. An interconnection agreement with ISO-NE existed under prior mill ownership but has since expired. Consequently, the electricity generated by the turbine cannot be exported to the grid. The Biomass Boiler cannot feasibly operate until the ISO-NE electrical interconnection agreement is reestablished. ND OTM anticipates this to occur in late October 2020.

Due to the extensive work still needed on the unit and the need to reestablish the ISO-NE electrical interconnection agreement, startup of the Biomass Boiler will occur later than anticipated. ND OTM has requested an extension of the compliance schedule and effective date for the 0.45 lb/MMBtu CO emission limit from November 1, 2020, to November 30, 2021. This time period is required to provide a sufficient startup and shakedown period, evaluate and optimize performance, and assess operational variability due to seasonality and mill operation.

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The Biomass Boiler shall not exceed the following CO emission limits when firing biomass:

Pollutant	lb/MMBtu	Averaging Time	Compliance Method
	0.8 (Prior to November 30, 2021)	30-day rolling average, at all operating times	
CO	0.45 (Beginning November 30, 2021)	30-day rolling average, excluding startup and shutdown	CEMS

Pollutant	lb/hr	Compliance Method
СО	212.2	
	(Prior to November 30, 2021)	40 C.F.R. Part 60,
	119.3	Appendix A
	(Beginning November 30, 2021)	

ND OTM shall develop and submit a boiler startup and shutdown CO minimization procedure to the Department by November 30, 2021. The procedure shall include startup and shutdown definitions and other information such as specific startup and shutdown timeframe ranges (including warm and cold startups), operating parameter measurements (i.e., boiler temperature, definition of first-fire, oxygen levels), and additional information as appropriate.

C. Incorporation into the Part 70 Air Emission License

Per *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140 § 1(C)(8), for a modification at the facility that has undergone NSR requirements or been processed through 06-096 C.M.R. ch. 115, the source must apply for an amendment to their Part 70 license within one year of commencing the proposed operations, as provided in 40 C.F.R. Part 70.5.

D. Annual Emissions

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

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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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants New Source Review License Amendment A-180-77-13-A 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 NSR License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This NSR 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 (2) of NSR license A-180-77-9-A (April 24, 2019):

(2) **Biomass Boiler CO**

A. CO emissions for the Biomass Boiler when firing biomass shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Pollutant	lb/MMBtu	Averaging Time	Compliance Method
СО	0.8 (Prior to November 30, 2021) 0.45 (Beginning November 30, 2021)	30-day rolling average, at all operating times 30-day rolling average, excluding startup and shutdown	CEMS

Pollutant	lb/hr	Compliance Method
СО	212.2	
	(Prior to November 30, 2021)	40 C.F.R. Part 60,
	119.3	Appendix A
	(Beginning November 30, 2021)	

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- B. Within six months of issuance of this NSR license, ND OTM shall submit a Biomass Boiler CO Emissions progress report to the Department. The report shall include progress-to-date on CO emission minimization and the expected plan to meet the future license requirements. [06-096 C.M.R. ch. 115, BPT]
- C. By November 30, 2021, ND OTM shall develop and submit to the Department a Biomass Boiler startup and shutdown procedure for the minimization of CO. The procedure shall include startup and shutdown definitions and other information such as specific startup and shutdown timeframe ranges (including warm and cold startups), operating parameter measurements (i.e., boiler temperature, definition of first-fire, oxygen levels), and additional information as appropriate. [06-096 C.M.R. ch. 115, BPT]

The following new condition shall apply:

(1) ND OTM shall submit an application to incorporate this NSR license amendment into the facility's Part 70 air emission license no later than 12 months from commencement of the requested operation. [06-096 C.M.R. ch. 140 § 1(C)(8)]

Done and dated in Augusta, maine this 30^{th} day of OCTOBER, 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION BY: for MELANIE LOYZIM. ACTING COMMISSIONER PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES Date of initial receipt of application: October 2, 2020 Date of application acceptance: October 2, 2020 Date filed with the Board of Environmental Protection: FILED This Order prepared by Benjamin Goundie, Bureau of Air Quality. OCT 30, 2020 State of Maine **Board of Environmental Protection**