



DEPARTMENT ORDER

**Pixelle Androscoggin LLC  
Franklin County  
Jay, Maine  
A-203-77-27-A**

**Departmental  
Findings of Fact and Order  
New Source Review  
NSR #27**

**FINDINGS OF FACT**

After review of the air emission license 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. REGISTRATION**

**A. Introduction**

FACILITY	Pixelle Androscoggin LLC
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	322121
NATURE OF BUSINESS	Pulp & Paper Mill
FACILITY LOCATION	Jay, Maine

**B. NSR License Description**

Pixelle Androscoggin LLC (Pixelle) has requested a New Source Review (NSR) license to install a 1.5 MMBtu/hr propane-fired heater at their wastewater treatment plant.

**C. Emission Equipment**

The following equipment is addressed in this NSR license:

**Fuel Burning Equipment**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur
WWTP Heater	1.5	16.4	Propane, negligible

D. 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 for the addition of a 1.5 MMBtu/hr propane-fired heater does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements.

The modification of a major source is considered a major or minor modification based on whether or not expected emissions increases exceed the “Significant Emission Increase” levels as given in *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. For a major stationary source, the expected emissions increase from each new, modified, or affected unit may be calculated as equal to the difference between the post-modification projected actual emissions and the baseline actual emissions for each NSR regulated pollutant.

1. Baseline Actual Emissions

Baseline actual emissions (BAE) for existing affected emission units are equal to the average annual emissions from any consecutive 24-month period within the ten years prior to submittal of a complete license application. The selected 24-month baseline period can differ on a pollutant-by-pollutant basis. However, there are no existing emission units which are considered “affected” by this project.

The only equipment addressed by this license is a new emission unit. Baseline actual emissions for new equipment are considered to be zero for all pollutants; therefore, the selection of a baseline year is unnecessary.

2. Projected Actual Emissions

New emission units must use potential to emit (PTE) emissions for projected actual emissions (PAE). Those emissions are presented in the following table.

**Projected Actual Emissions**

Equipment	PM (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)	SO <sub>2</sub> (tpy)	NO <sub>x</sub> (tpy)	CO (tpy)	VOC (tpy)
WWTP Heater	0.1	0.1	0.1	--	0.9	0.5	0.1
<b>Total</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>--</b>	<b>0.9</b>	<b>0.5</b>	<b>0.1</b>

### 3. Emissions Increases

Emissions increases are calculated by subtracting BAE from the PAE. The emission increase is then compared to the significant emissions increase levels.

Pollutant	Baseline Actual Emissions (ton/year)	Projected Actual Emissions (ton/year)	Emissions Increase (ton/year)	Significant Emissions Increase Levels (ton/year)
PM	0	0.1	0.1	25
PM <sub>10</sub>	0	0.1	0.1	15
PM <sub>2.5</sub>	0	0.1	0.1	10
SO <sub>2</sub>	0	0.0	0.0	40
NO <sub>x</sub>	0	0.9	0.9	40
CO	0	0.5	0.5	100
VOC	0	0.1	0.1	40

### 4. Classification

Since emissions increases do not exceed significant emissions increase levels, 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 the WWTP Heater.

## 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 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 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. WWTP Heater

Pixelle will install and operate the WWTP Heater to provide heat at the wastewater treatment plant. The WWTP Heater is rated at 1.5 MMBtu/hr and will fire propane.

1. BACT Findings

The BACT emission limits for the WWTP Heater are based on the following:

PM/PM <sub>10</sub>	–	0.7 lb/1000 gal based on AP-42 Table 1.5-1 dated 7/08
SO <sub>2</sub>	–	0.054 lb/1000 gal based on AP-42 Table 1.5-1 dated 7/08 and a fuel sulfur content of 0.54 gr/100 ft <sup>3</sup> of gas vapor
NO <sub>x</sub>	–	13 lb/1000 gal based on AP-42 Table 1.5-1 dated 7/08
CO	–	7.5 lb/1000 gal based on AP-42 Table 1.5-1 dated 7/08
VOC	–	1.0 lb/1000 gal based on AP-42 Table 1.5-2 dated 7/08
Visible Emissions	–	06-096 C.M.R. ch. 101

The BACT emission limits for the WWTP Heater are the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
WWTP Heater	0.01	0.01	neg.	0.21	0.12	0.02

2. Visible Emissions

Visible emissions from the WWTP Heater shall not exceed 10% opacity on a six-minute block average basis.

3. Periodic Monitoring

Periodic monitoring for the WWTP Heater shall include recordkeeping to document fuel use both on a monthly and calendar year total basis.

4. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to the size of the unit, the WWTP Heater is not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

5. National Emission Standards for Hazardous Air Pollutants (NESHAP):  
40 C.F.R. Part 63, Subpart JJJJJ

As a gas-fired unit as defined in 40 C.F.R. § 63.11237, the WWTP Heater is not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers* 40 C.F.R. Part 63, Subpart JJJJJ. [40 C.F.R. § 63.11195(e)]

C. Incorporation Into the Part 70 Air Emission License

Pursuant to *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

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated assuming constant operation of each emission unit at maximum capacity unless the unit is limited by the license to less than maximum capacity operation. In each case where a unit is license-limited, the combination of operating conditions that would produce the greatest emissions was considered.

Please note, this information provides the basis for fee calculation only and should not be construed to represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

**Total Licensed Annual Emissions for the Facility**  
**Tons/year**  
(used to calculate the annual license fee)

Emission Unit	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Power Boilers #1 and #2	119.1	101.6	436.4	226.9	19.9	5.1
Boiler #3	210.2	210.2	1681.9	841.0	5256.0	614.1
Recovery Boilers	583.9	583.9	3532.9	934.3	1167.7	97.7
Smelt Tank #1	60.0	60.0	11.8	--	--	--
Smelt Tank #2	51.2	49.1	17.1	--	--	--
A Lime Kiln	111.7	111.7	74.6	145.9	1459.9	6.1
B Lime Kiln	109.5	109.5		145.9	1459.9	6.1
RTO	4.4	4.4	8.8	7.49	5.3	13.1

Emission Unit	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Grinders	--	--	--	--	--	126.7
#3 PM – IR Dryer	3.0	3.0	0.2	8.8	9.6	0.6
#4 PM – IR Dryer	2.1	2.1	0.4	10.5	16.6	4.4
#4 PM – Floatation Dryer	1.8	1.8	0.4	8.8	14.0	3.5
#4 PM – Calendering Roll	7.4	6.1	18.5	18.4	18.4	6.1
#4 PM Trim Conveyor System	8.8	4.4	--	--	--	--
Water Treatment Main Furnace	1.6	1.6	6.8	4.1	0.5	0.1
Water Treatment Small Furnace	0.6	0.6	2.3	1.4	0.2	0.1
WWTP Heater	0.1	0.1	--	0.9	0.5	0.1
WWTP	--	--	--	--	--	500*
<b>Total TPY</b>	<b>1275.4</b>	<b>1250.1</b>	<b>5792.1</b>	<b>2354.4</b>	<b>9428.1</b>	<b>1383.8</b>

\* This represents a rough, high-end estimate of emissions of methanol from the WWTP based on quarterly performance test results and is not considered a limit.

### III. AMBIENT AIR QUALITY ANALYSIS

Pixelle previously submitted an ambient air quality impact analysis outlined in air emission licenses A-203-77-13-A (dated January 19, 2012) and A-203-71-E-R (dated September 3, 1996) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (AAQS). An additional ambient air quality impact analysis is not required for this NSR license.

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

The Department hereby grants New Source Review License A-203-77-27-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the specific conditions below.

Severability. The invalidity or unenforceability of any provision of this License or part thereof 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) WWTP Heater

A. The WWTP Heater is licensed to fire propane. Records of fuel use shall be kept on a monthly and calendar year basis. [06-096 C.M.R. ch. 115, BACT]

B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
WWTP Heater	0.01	0.01	neg.	0.21	0.12	0.02

C. Visible emissions from the boiler shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

(2) Pixelle shall submit an application to incorporate this NSR license 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 18<sup>th</sup> DAY OF OCTOBER, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for  
MELANIE LOYZIM, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: August 10, 2021

Date of application acceptance: August 16, 2021

Date filed with the Board of Environmental Protection:

This Order prepared by Benjamin Goundie, Bureau of Air Quality.

