

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

#### **DEPARTMENT ORDER**

Pixelle Androscoggin LLC Franklin County Jay, Maine A-203-77-28-M Departmental
Findings of Fact and Order
New Source Review
NSR #28

#### 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. REGISTRATION

# A. Introduction

FACILITY	Pixelle Androscoggin LLC
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Revision
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 address the removal of pulping equipment from its air emission license, remove black liquor solids and fuel oil as licensed fuels for Recovery Boilers #1 and #2, reestablish facility potential emissions, and document all remaining applicable NSR requirements for the facility.

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# C. Emission Equipment

Pixelle has requested the removal of all licensed emissions units from its air emission license except for the following:

# **Fuel Burning and Process Equipment**

<u>Unit</u>	Max. Capacity Fuel Type; % sulfur		Year of Installation	Stack #				
Recovery Boilers								
Recovery Boiler #1 (RB1)	315 MMBtu/hr	Natural Gas, negligible	1965	CRB (Combined				
Recovery Boiler #2 (RB2)	405 MMBtu/hr	ivaturar Gas, negligiote	1975-1976	Recovery Boiler Stack)				
Pulp Dryer and Paper Mi	Pulp Dryer and Paper Mill Units							
#1 Paper Machine #2 Paper Machine	N.A.	None	N/A	N/A				
#3 Paper Machine Infrared Dryers	13.92 MMBtu/hr	Propane, negligible Natural Gas, negligible	1999	PM3ID				
#4 Paper Machine 2 Infrared Dryers	9.6 MMBtu/hr	Propane, negligible Natural Gas, negligible	1996	PM4IR				
#4 Paper Machine 2 Air Flotation Dryers	4.0 MMBtu/hr (for each dryer)	1 7 5 5		PM4FD				
#4 Paper Machine Soft-Nip Calender Roll	Distillate Fuel, 0.0015%  14.0 MMBtu/hr  Propane, negligible  Natural Gas, negligible		1996	PM4CR				
#4 Paper Machine Trimvac paper trim collection vacuum system		N.A.	1996	(Multiple Stacks)				
#5 Paper Machine			N.A.	N.A.				
Water Treatment Plant								
WTP Main Furnace	3.1 MMBtu/hr	Distillate Evel 0.00159/	2004	Furnace Vent				
WTP Small Furnace	1.05 MMBtu/hr	Distillate Fuel, 0.0015%	2014	Furnace Vent				
Water Treatment Heater *	1.5 MMBtu/hr	Propane, negligible	2021	Heater Vent				
Wastewater Treatment Pl	ant							
WWTP Clarifiers, Wet Wells, and Lagoon		N.A.	1964	fugitive				
Bulk Handling Systems S	Bulk Handling Systems Source Group							
Starch Silos (2 in Additives, 3 in Coating Prep)	100 tons (each) N.A.		Various Dates, 1980-2005	N.A.				
WWTP Lime Silo	105 tons		1983					
Gasoline Storage Tank								
Gasoline Storage Tank	10,000 gal	N.A.	11-1-1988	fugitive				

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<u>Unit</u> Ancillary Mill Services	Max. Capacity	Fuel Type; % sulfur	Year of Installation	Stack #	
Landfill					
Propane Flares	N.A. N.A. N.A.				
<b>Temporary Units</b> – if on-site		N.A.	IV.A.	IV.A.	
longer than four weeks					
Steam Jenny	1.7 MMBtu/hr	Distillate Fuel (kerosene)	1982	fugitive	

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# **Generators/Engines**

Equipment	Output	Fuel Type, % sulfur
Existing Emergency RICE	≥500 HP	Distillate Fuel,
Existing Emergency RICE	<500 HP	0.0015%

# D. Project Description

Pixelle has historically operated an integrated pulp and paper mill producing a variety of paper grades from bleached and unbleached kraft pulp. Due to a pulp digester explosion in April of 2020, the mill no longer manufactures pulp onsite. Instead, the mill has been purchasing pulp from other mills in order to produce paper. Pixelle has elected to permanently decommission all emissions units associated with pulp production. The mill also plans to permanently decommission Boiler #3. Pixelle has requested the removal of all emissions units not listed in Section I(C) above from its license.

Pixelle has also requested that black liquor solids and fuel oil be removed as licensed fuels for RB1 and RB2.

# 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 Pixelle does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements for the remaining licensed equipment.

The proposed revision will not change any short-term emission limits for the remaining licensed equipment and will result in an overall decrease in the facility's annual emissions. 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

<sup>\*</sup>Previously identified as WWTP Heater or Wastewater Treatment Plant Heater.

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since the proposed revision 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 shall be submitted no later than 12 months from commencement of the requested operation.

# II. NSR MINOR REVISION

# A. Fuel Change for Recovery Boilers #1 and #2

Pixelle has requested that black liquor solids (BLS) and fuel oil be removed as licensed fuels from the mill's air emission license for RB1 and RB2, and that RB1 and RB2 no longer be categorized as recovery boilers. This change in licensed fuels will not result in changes to the short-term emission limits for the units; however, it does result in a change in regulatory applicability. RB1 and RB2 will no longer be subject to 40 C.F.R. Part 63, Subpart MM, National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, and will instead be subject to 40 C.F.R. Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

RB1 and RB2 shall comply with all applicable requirements contained in 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:

# 1. Classification

RB1 and RB2 shall be classified in the *Units designed to burn gas 1 subcategory* as defined in 40 C.F.R. § 63.7575. This category includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels.

#### 2. Work Practice Standards

Pixelle shall comply with applicable work practice standards located in 40 C.F.R. Part 63, Subpart DDDDD, Table 3 for RB1 and RB2 including, but not limited to, the following:

- a. Conduct a tune-up of the units annually as specified in 40 C.F.R. § 63.7540.
- b. Conduct a one-time energy assessment performed by a qualified energy assessor. The energy assessment must include the following:
  - (1) A visual inspection of the boiler or process heater system.

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- (2) An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
- (3) An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
- (4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
- (5) A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.
- (6) A list of cost-effective energy conservation measures that are within the facility's control.
- (7) A list of the energy savings potential of the energy conservation measures identified.
- (8) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[40 C.F.R. Part 63, Subpart DDDDD, Table 3]

# B. Applicable NSR Requirements

Pulp production at Pixelle ceased in April of 2020, and since then, the facility has been purchasing pulp from other mills in order to continue producing paper on its five existing paper machines. Pixelle has requested the removal of all pulp production equipment from its license. Only the equipment listed in Section I(C) above will remain.

Due to the significant change in the facility's operation, many of the previously issued NSR licenses and amendments contain requirements that are no longer applicable to the facility. In order to simplify compliance demonstration and determination, the Department has proposed concatenating all currently applicable NSR requirements in this license.

Below is an accounting of all NSR licensing actions currently in effect for Pixelle, and a determination of what, if any, requirements from those licensing actions are still applicable.

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# 1. A-203-77-1-M (issued 11/1/2006)

NSR minor revision A-203-77-1-M addressed the addition of the WTP Small Furnace to the facility's license and the maximum allowed sulfur content in fuel fired by the WTP Main Furnace and WTP Small Furnace.

Replacement of the WTP Small Furnace by a unit of similar size was authorized by NSR A-203-77-21-A; therefore, all conditions in A-203-77-1-M specific to the WTP Small Furnace are no longer relevant.

NSR minor revision A-203-77-1-M established a maximum fuel sulfur content for the WTP Furnaces of 0.5%. However, pursuant to 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, the distillate fuel purchased or otherwise obtained for use in the WTP Main Furnace and WTP Small Furnace shall not exceed 0.0015% by weight (15 ppm). The relevant condition will be updated as part of this license.

Visible emission standards in 06-096 C.M.R. ch. 101 have been updated since the issuance of A-203-77-1-M. The relevant condition is updated as part of this license.

All applicable requirements from A-203-77-1-M have been included in the Order section of this license.

#### 2. A-203-77-2-M (issued 1/19/2007)

NSR minor revision A-203-77-2-M addressed modifications to the combustion air delivery system and liquor gun nozzles of RB1.

No new requirements were introduced in A-203-77-2-M.

3. A-203-77-3-A (issued 10/31/2008)

NSR license A-203-77-3-A established Best Available Retrofit Technology (BART) requirements for Pixelle. All conditions in A-203-77-3-A were replaced by NSR license A-203-77-11-A (11/2/2010).

Therefore, there are no applicable requirements contained in A-203-77-3-A.

# 4. A-203-77-4-A (issued 4/22/2008)

NSR minor modification A-203-77-4-A addressed two projects conducted on RB1. One project encompassed repair and replacement work on the upper furnace area including replacement of upper furnace walls and boiler tubes. The second project involved replacement of the oil burner igniters and flame sensor system.

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The license included a BACT analysis that established SO<sub>2</sub> and NO<sub>x</sub> emission limits. Separate SO<sub>2</sub> limits were included depending on the firing rate of black liquor in RB1; however, because this NSR license removes black liquor as a licensed fuel for RB1, only the appropriate limits have been retained.

Pixelle shall not exceed the following SO<sub>2</sub> and NO<sub>x</sub> emission limits for RB1:

Pollutant	<b>Emission Limits</b>	Averaging Time
$SO_2$	140 ppmvd @ 8% O <sub>2</sub>	30-day rolling average basis
$NO_x$	150 ppmvd @ 8% O <sub>2</sub>	24-hr block average basis

Applicable requirements from A-203-77-4-A have been included in the Order section of this license.

# 5. A-203-77-5-A (issued 1/6/2009)

NSR minor modification A-203-77-5-A addressed several changes to the mechanical groundwood operation in an effort to increase production capacity while decreasing energy and water consumption.

Pixelle has requested the removal of all of the Groundwood Mill Source Group. Therefore, there are no longer any applicable requirements contained in A-203-77-5-A.

# 6. A-203-77-6-A (issued 7/15/2009)

NSR minor modification A-203-77-6-A authorized an increase in the sulfur content of the fuel fired in the Flash Dryer and #4 Paper Machine Calender Roll from 0.3% to 0.5%. However, pursuant to 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, the sulfur content of the distillate fuel purchased or otherwise obtained for use in the Flash Dryer and #4 Paper Machine Calender Roll shall not exceed 0.0015% by weight (15 ppm). The relevant condition will be updated as part of this license.

# 7. A-203-77-8-A (issued 11/24/2009)

NSR minor modification A-203-77-8-A addressed modifications to the #4 Paper Machine to increase the steam drying capacity.

No enforceable license conditions were contained in A-203-77-8-A. Therefore, there are no applicable requirements to be included in this license.

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# 8. A-203-77-9-A (issued 3/30/2010)

NSR minor modification A-203-77-9-A addressed changes to the A Digester Chip Bin, B Digester Chip Bin, and LVHC system.

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Pixelle has requested the removal of this equipment from its air emission license. Therefore, there are no longer any applicable requirements contained in A-203-77-9-A.

# 9. A-203-77-10-M (issued 9/10/2010)

NSR minor revision A-203-77-10-M addressed modifications to the RB1 ESP ash collection system to better control the chloride level in the black liquor being fired in RB1. This minor revision required Pixelle to collect and treat emissions from the new ash conveying system in the RTO as part of the HVLC gas collection system.

As part of this license, black liquor has been removed as a licensed fuel for RB1. Pixelle has also requested the removal of the RTO and HVLC gas collection system from its air emission license. Therefore, there are no longer any applicable requirements contained in A-203-77-10-M.

# 10. A-203-77-11-M (issued 11/2/2010)

NSR license A-203-77-11-M establishes BART requirements for Power Boilers #1 and #2, and Recovery Boiler #2.

Pixelle has requested the removal of Power Boilers #1 and #2 from its air emission license. Therefore, all conditions specific to Power Boilers #1 and #2 have been deleted. Applicable requirements from A-203-77-11-M related to Recovery Boiler #2 have been included in the Order section of this license.

# 11. A-203-77-12-A (issued 9/16/2011)

NSR minor modification A-203-77-12-A addressed the replacement of the burner in the B Lime Kiln.

Pixelle has requested the removal of the B Lime Kiln from its air emission license. Therefore, there are no longer any applicable requirements contained in A-203-77-12-A.

# 12. A-203-77-13-A (issued 1/19/2012)

NSR major modification A-203-77-13-A addressed modifications of the A Lime Kiln, B Lime Kiln, RTO, #3 Paper Machine Infrared Dryers, #4 Paper Machine Infrared

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Dryers, #4 Paper Machine Air Floatation Dryers, and #4 Paper Machine Calender Roll to add the capability of firing natural gas.

Pixelle has requested the removal of the A Lime Kiln, B Lime Kiln, and RTO from its air emission license. Therefore, conditions specific to these units have been deleted. All other applicable requirements from A-203-77-13-A have been included in the Order section of this license.

# 13. A-203-77-14-A (issued (3/12/2012)

NRS minor modification A-203-77-14-A addressed the replacement of a section of the front wall of RB1. It also contained a condition requiring Pixelle to install and operate a thermal imaging bed camera. This requirement was subsequently removed by A-203-77-20-A. All other applicable requirements from A-203-77-14-A have been included in the Order section of this license.

# 14. A-203-77-16-M (issued 9/27/2012)

Minor revision A-203-77-16-M amended minor modification A-203-77-9-A to address 40 C.F.R. Part 63, Subpart S applicability of the A and B Chip Bins.

Pixelle has requested the removal of the A and B Chip Bins from its air emission license. Therefore, there are no longer any applicable requirements contained in A-203-77-16-M.

# 15. A-203-77-17-A (issued 10/31/2012)

NSR minor modification A-203-77-17-A addressed changes to the PM emission limits from the lime kilns and the implementation of a federally enforceable 10% combined annual capacity factor limit on Power Boilers #1 and #2.

Pixelle has requested the removal of the A and B Lime Kilns, Power Boiler #1, and Power Boiler #2 from its license. Therefore, there are no longer any applicable requirements contained in A-203-77-17-A.

# 16. A-203-77-18-A (issued 2/14/2013)

NSR minor modification A-203-77-18-A addressed the addition of natural gas as a licensed fuel for RB1, RB2, and Boiler #3.

Pixelle has requested the removal of Boiler #3 from its air emission license. Therefore, conditions specific to Boiler #3 have been deleted. All other applicable requirements from A-203-77-18-A have been included in the Order section of this license.

# 17. A-203-77-19-A (issued 2/8/2013)

NSR minor modification A-203-77-19-A addressed modifications to the #2 Paper Machine to improve reliability and performance.

No enforceable license conditions were contained in A-203-77-19-A. Therefore, there are no applicable requirements to be included in this license.

#### 18. A-203-77-20-A (issued 1/16/2015)

NSR minor modification A-203-77-20-A authorized the replacement of the economizers on RB1. Both economizers were replaced with like-kind, comparable units.

As part of A-203-77-20-A, Pixelle also requested the removal of the requirement introduced in A-203-77-14-A to operate a thermal imaging bed camera in RB1, as it proved to be unreliable and inconsistent. This requirement was deleted in A-203-77-20-A. No other enforceable license conditions were contained in A-203-77-20-A. Therefore, there are no applicable requirements to be included in this license.

# 19. A-203-77-21-A (issued 2/20/2015)

NSR minor modification A-203-77-21-A authorized the replacement of the WTP Small Furnace with a new unit of similar capacity.

A condition addressing allowable sulfur content in the fuel fired in the WTP Small Furnace is included in A-203-77-21-A. This condition was superseded by requirements in the Part 70 license limiting the sulfur content of distillate fuel to no more than 0.0015%. For clarity and consistency, the newer Part 70 fuel sulfur limit will be included in this license. All other applicable requirements from A-203-77-21-A have been included in the Order of this license.

#### 20. A-203-77-22-A (issued 5/15/2018)

NSR major modification A-203-77-22-A addressed the modification of the #3 and #4 Paper Machines to allow production of diversified paper stock and the replacement of a section of screen tubes in RB1. Equipment affected, but not modified, by this project include RB2, Smelt Dissolving Tanks 1 and 2, the A and B Lime Kilns, the A and B Slakers, the RTO, Bleach Plant A, the HVLC Source Group, and the LVHC Source Group.

Pixelle has requested the removal of all equipment addressed by A-203-77-22-A other than the #3 and #4 Paper Machines, and RB2.

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As part of the project authorized by A-203-77-22-A, Pixelle utilized 81.6 tons of VOC offset credits certified in the Bucksport Generation LLC license A-22-77-17-O (5/15/2018) to offset 71.0 tons of project related VOC emissions increases at a 1.15 to 1 ratio.

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There are no other applicable conditions in A-203-77-22-A to be included in this license.

# 21. A-203-77-23-M (issued 7/16/2018)

NSR minor revision A-203-77-23-M authorized the replacement of two existing 900 HP motors on the stock preparation system of the #4 Paper Machine.

No new requirements were introduced in A-203-77-23-M.

#### 22. A-203-77-24-M (issued 1/4/2019)

NSR minor revision A-203-77-24-M authorized the return to service of an existing Salt Cake Mix Tank. Emissions from the Salt Cake Mix Tank were to be collected and controlled by the HVLC Source Group and RTO.

Pixelle has requested the removal of the Salt Cake Mix Tank, HVLC Source Group, and RTO from its air emission license. Therefore, there are no longer any applicable requirements contained in A-203-77-24-M.

# 23. A-203-77-25-A (issued 4/11/2019)

NSR minor modification A-203-77-25-A addressed modifications to the #5 Paper Machine and stock preparation system to optimize the productivity of specialty paper grades. The license also included changes to pulp mill production to support increased #5 Paper Machine fiber needs.

Pixelle has requested to removal of all pulping equipment from its license. No new requirements were introduced in A-203-77-25-A.

# 24. A-203-77-26-A (issued 8/1/2019)

NSR minor modification A-203-77-26-A addressed modifications to the #4 Paper Machine to improve product grades.

No new requirements were introduced in A-203-77-26-A.

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25. A-203-77-27-A (issued 10/18/2021)

NSR minor modification A-203-77-27-A authorized the installation of a 1.5 MMBtu/hr propane-fired heater in the facility's Wastewater Treatment plant. All applicable requirements have been included in the Order section of this license.

# 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. For the purposes of this NSR license, the date of commencing the proposed operations shall be considered the date of issuance of this NSR license.

# 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 licensed 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)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	СО	VOC
Recovery Boilers	583.9	583.9	3,532.9	934.3	1,167.7	97.7
#3PM – IR Dryer	3.0	3.0	0.2	8.8	9.6	0.6
#4PM – IR Dryer	2.1	2.1	0.4	10.5	16.6	4.4
#4PM – Floatation	1.8	1.8	0.4	8.8	14.0	3.5
Dryer	1.0	1.0	0.1	0.0	1 1.0	3.3
#4PM – Calender	7.4	6.1	18.5	18.4	18.4	6.1
Roll	/ <b>. +</b>	0.1	10.5	10.4	10.4	0.1
#4PM Trim	8.8	4.4				
Conveyor System	0.0	4.4				

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	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
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						25.0*
Total TPY	609.3	603.6	3,561.5	987.2	1,227.5	112.6

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# 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**

The Department hereby grants New Source Review Minor Revision A-203-77-28-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.

This NSR license is intended to concatenate all currently applicable NSR requirements into one location. No changes to requirements are intended except where specifically addressed in the Findings of Fact. Therefore, the following Conditions replace all previous Conditions in NSR licenses and amendments issued to the facility. Although citations to original licenses have been maintained for clarity, this license becomes the base condition for future licensing actions.

#### **SPECIFIC CONDITIONS**

# (1) Removal of Emissions Units

All emissions units previously licensed to operate at this facility that are not listed in Section I(C) of this NSR license are no longer licensed to operate as of the date of issuance

<sup>\*</sup>This represents a high-end estimate of emissions of methanol from the WWTP for a non-integrated mill.

of this NSR license. This includes previously licensed emissions units associated with the kraft pulping process and resulting emissions. [06-096 C.M.R. ch. 115]

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# (2) Water Treatment Main Furnace and Water Treatment Small Furnace

- A. Pixelle shall only fire distillate fuel oil not exceeding a maximum sulfur content of 0.0015% by weight in the Water Treatment Main Furnace and in the Water Treatment Small Furnace. Compliance shall be demonstrated by fuel records from the supplier. [A-203-77-1-M (11/1/2006) and A-203-77-21-A (2/20/2015); BPT]
- B. Emissions shall not exceed the following:

<b>Emission Unit</b>	Pollutant	lb/MMBtu	Origin and Authority
Water Treatment Main Furnace	PM	0.12	06-096 ch. 103, § 2(B)(1)(a)

C. Emissions shall not exceed the following:

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)
Water Treatment Main Furnace	0.4	0.4	1.6	0.93	0.11	0.01
Water Treatment Small Furnace	0.02	0.02	0.53	0.15	0.04	0.01

[A-203-77-1-M (11/1/2006) and A-203-77-21-A (2/20/2015); BPT]

- D. Visible emissions from either the Water Treatment Main Furnace or the Water Treatment Small Furnace shall not exceed 20% opacity on a six (6) minute block average basis. [06-096 C.M.R. ch. 101, § 3.A.(2)]
- E. Compliance with the above emission limits shall be demonstrated through testing according to the applicable emissions test method of 40 CFR Part 60, Appendix A, on the request of the Department. [A-203-77-21-A (2/20/2015); BPT]

# (3) Recovery Boiler #1

- A. Recovery Boiler #1 (RB1) is licensed to fire natural gas. [A-203-77-18-A (2/14/2013); BPT]
- B. The quantity of fuel fired in RB1 shall be monitored by fuel flow meters. [(A-203-77-18-A (2/14/2013); BPT]

C. Pixelle shall not exceed the following SO<sub>2</sub> and NO<sub>x</sub> emission limits for RB1:

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Pollutant	<b>Emission Limits</b>	Averaging Time
$SO_2$	140 ppmvd @ 8% O <sub>2</sub>	30-day rolling average basis
$NO_x$	150 ppmvd @ 8% O <sub>2</sub>	24-hr block average basis

[A-203-77-4-A (4/22/2008); BPT]

- D. Pixelle shall utilize boiler maintenance; falling film concentrators; reduction in recovery furnace deposition; and the composite tubes in the lower part of the furnace as BACT for GHG emissions from RB1. [A-203-77-14-A (3/12/2012); BPT]
- E. Pixelle shall operate and maintain three (3) differential pressure instruments for monitoring RB1 performance to inform improvements in boiler cleaning performance. [A-203-77-14-A (3/12/2012); BPT]

# (4) Recovery Boiler #2

- A. Recovery Boiler #2 (RB2) is licensed to fire natural gas. [A-203-77-18-A (2/14/2013); BPT]
- B. The quantity of fuel fired in RB2 shall be monitored by fuel flow meters. [A-203-77-18-A (2/14/2013); BPT]
- C. Pixelle shall not exceed the following SO<sub>2</sub> emission limit for RB2:

Pollutant	<b>Emission Limits</b>	Averaging Time	
$SO_2$	150 ppmvd @ 8% O <sub>2</sub>	30-day rolling average basis	

[A-203-77-11-A (11/2/2010); BART]

# (5) RB1 and RB2 40 C.F.R. Part 63, Subpart DDDDD Requirements

Pixelle shall comply with applicable work practice standards contained in 40 C.F.R. Part 63, Subpart DDDDD, Table 3 for RB1 and RB2 including, but not limited to, the following:

- A. Conduct a tune-up of the units annually as specified in 40 C.F.R. § 63.7540.
- B. Conduct a one-time energy assessment performed by a qualified energy assessor. The energy assessment must include the following:
  - 1. A visual inspection of the boiler or process heater system.

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- 2. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
- 3. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
- 4. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
- 5. A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.
- 6. A list of cost-effective energy conservation measures within the facility's control.
- 7. A list of the energy savings potential of identified energy conservation measures.
- 8. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[40 C.F.R. Part 63, Subpart DDDDD, Table 3]

# (6) #3 and #4 Paper Machine Infrared Dryers

# A. Fuel Use Requirements

The #3 and #4 Paper Machine Infrared Dryers are licensed to fire propane and natural gas. Pixelle shall maintain records of the amounts of each type of fuel fired in the #3 and #4 Paper Machine Infrared Dryers. [A-203-77-13-A (1/19/2012); BACT]

# B. Air Pollution Control Strategies

Pixelle shall ensure that the #3 and #4 Paper Machine Infrared Dryers are operated and maintained in a manner consistent with good combustion practices such that applicable emission limits are met. [A-203-77-13-A (1/19/2012); BACT]

C. Emissions from the #3 and #4 Paper Machine Infrared Dryers shall not exceed the following:

<b>Emission Unit</b>	Pollutant	lb/MMBtu	Origin and Authority
#3 Paper Machine Infrared Dryers	PM	0.05	A-203-77-13-A, (1/19/2012); BPT

<b>Emission Unit</b>	Pollutant	lb/MMBtu	Origin and Authority			
#4 Paper Machine Infrared Dryers	PM	0.05	A-203-77-13-A, (1/19/2012); BPT			

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D. Emissions from the #3 and #4 Paper Machine Infrared Dryers shall not exceed the following [A-203-77-13-A (1/19/2012); BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
#3 Paper Machine Infrared Dryers	0.7	0.7	0.7	0.05	2.0	2.2	0.14
#4 Paper Machine Infrared Dryers	0.5	0.5	0.5	0.01	2.4	3.8	1.0

# (7) #4 Paper Machine Air Floatation Dryers

# A. Fuel Use Requirements

The #4 Paper Machine Air Floatation Dryers are licensed to fire propane and natural gas. Pixelle shall maintain records of the amounts of each type of fuel fired in the #4 Paper Machine Air Floatation Dryers. [A-203-77-13-A (1/19/2012); BACT]

# B. Air Pollution Control Strategies

Pixelle shall ensure that the #4 Paper Machine Air Floatation Dryers are operated and maintained in a manner consistent with good combustion practices such that applicable emission limits are met. [A-203-77-13-A (1/19/2012); BACT]

C. Emissions from the #4 Paper Machine Air Floatation Dryers shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
#4 Paper Machine Air Floatation Dryers	PM	0.05	A-203-77-13-A (1/19/2012); BPT

D. Emissions from the #4 Paper Machine Air Floatation Dryers shall not exceed the following [A-203-77-13-A (1/19/2012); BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
#4 Paper Machine Air Floatation Dryers	0.4	0.4	0.4	0.1	2.0	3.2	0.8

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# (8) #4 Paper Machine Calender Roll

# A. Fuel Use Requirements

The #4 Paper Machine Calender Roll is licensed to fire propane, #2 fuel oil, and natural gas. Pixelle shall maintain records of the amounts of each type of fuel fired in the #4 Paper Machine Calender Roll. [A-203-77-13-A (1/19/2012); BACT]

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# B. Air Pollution Control Strategies

Pixelle shall ensure that the #4 Paper Machine Calender Roll is operated and maintained in a manner consistent with good combustion practices such that applicable emission limits are met. [A-203-77-13-A (1/19/2012); BACT]

C. Emissions from the #4 Paper Machine Calender Roll shall not exceed the following:

<b>Emission Unit</b>	Emission Unit Pollutant		Origin and Authority		
#4 Paper Machine Calender Roll	PM	0.12	A-203-77-13-A (1/19/2012); BPT		

D. Emissions from the #4 Paper Machine Calender Roll shall not exceed the following [A-203-77-13-A (1/19/2012); BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
#4 Paper Machine Calender Roll	1.7	1.4	1.4	7.1	4.2	4.2	1.4

(9) Pixelle is authorized to complete the PM4 project as described in NSR license A-203-77-26-A, and shall submit an application to incorporate NSR license A-203-77-26-A 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) and A-203-77-26-A (8/1/2019)]

# (10) Water Treatment Heater

A. The Water Treatment Heater is licensed to fire propane. Records of fuel use shall be kept on a monthly and calendar year basis. [A-203-77-27-A (10/18/2021); BACT]

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B. Emissions from the Water Treatment Heater shall not exceed the following [A-203-77-27-A (10/18/2021); 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)
Water	0.01	0.01		0.21	0.12	0.02
Treatment Heater	0.01	0.01		0.21	0.12	0.02

- C. Visible emissions from the Water Treatment Heater shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3) and A-203-77-27-A (10/18/2021)]
- D. Pixelle shall submit an application to incorporate NSR license A-203-77-27-A 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) and A-203-77-27-A (10/18/2021)]
- (11) Pixelle 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. The date of commencing the proposed operations shall be considered the date of issuance of this NSR license. [06-096 C.M.R. ch. 140 § 1(C)(8)]

Done and dated in augusta, maine this  $16^{th}$  day of DECEMBER, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

MELANIE LOYZIM, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

for

Date of initial receipt of application: 8/25/2021

Date of application acceptance: 9/7/2021

Date filed with the Board of Environmental Protection:

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

FILED

DEC 16, 2021

State of Maine Board of Environmental Protection