

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

#### **DEPARTMENT ORDER**

Louisiana-Pacific Corporation Aroostook County New Limerick, Maine A-327-77-9-A Departmental
Findings of Fact and Order
New Source Review
NSR #9

#### 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. <u>REGISTRATION</u>

#### A. Introduction

FACILITY	Louisiana-Pacific Corporation
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	321219
NATURE OF BUSINESS	Reconstituted Wood Product Manufacturing
FACILITY LOCATION	240 Station Road, New Limerick, Maine

#### B. NSR License Description

Louisiana-Pacific Corporation (LP) has requested a New Source Review (NSR) license to expand the mill to manufacture a new type of specialty engineered wood panel product. This project, known as the Smooth Panel Line Project, involves the installation of a new finishing line to produce panels with a smooth, non-textured surface.

With this license, the Department is also taking this opportunity to make the following changes:

- 1. Removing equipment that was previously permitted but not installed; and
- 2. Correcting the heat input for Finishing Line Oven #4.

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# C. Emission Equipment

The following new equipment is addressed in this NSR license:

# **Fuel Burning Equipment**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur	Manf. Date
Finishing Oven #7 (Endo Oven)	5.25	58	Propane, negligible	2024
Finishing Oven #8 (CT Oven #1)	8.75	97	Propane, negligible	2024
Finishing Oven #9 (CT Oven #2)	8.75	97	Propane, negligible	2024

# **Process Equipment**

Equipment	Description	Pollution Control Equipment
Smooth Panel	Surface treatments for finished product using a curtain coater and marking systems	None
Finishing Line	Surface treatments for finished product using high-pressure spray guns	Enclosed booths with filters

The size of the following equipment is being corrected.

## **Fuel Burning Equipment**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur	Manf. Date
Finishing Line Oven #4	5.0*	54.6	Propane, negligible	2021

<sup>\*</sup> Corrected from the previously licensed 6.35 MMBtu/hr. Emission limits for this oven have been recalculated based on the previously established Best Available Control Technology emission rates.

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The following equipment was previously licensed as new equipment in NSR license A-327-77-5-A (issued 3/5/2021). However, it was not installed. Pursuant to *Minor and Major Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115, approval to construct the following equipment is considered invalid and applicable requirements specific to this equipment are being removed.

#### **Fuel Burning Equipment**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur
Specialty Pre-Heat Oven #1	3.15	34.4	Propane, negligible
Specialty Drying Oven #1	3.15	34.4	Propane, negligible
Specialty Drying Oven #2	3.15	34.4	Propane, negligible

#### **Process Equipment**

Equipment	Description	Pollution Control Equipment
Specialty Finish	Surface treatments for finished product using fan coaters	None
Coating Line	Surface treatments for finished product using high-pressure spray guns	Enclosed booths with filters
Misc. Product Finishing Line	Surface treatments for finished product using high-pressure spray guns	Enclosed booths with filters

#### D. Definitions

*Records* or *Logs* mean either hardcopy or electronic records.

### E. Project Description

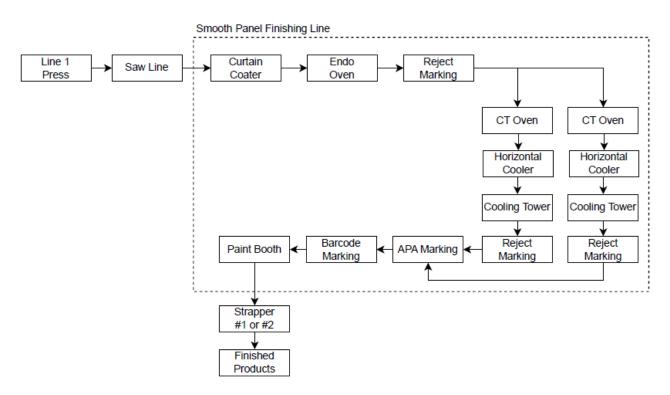
LP currently produces textured siding panels that have a cedar-like appearance. LP proposes to also manufacture a panel product with a smooth or brushstroke appearance. The change in the panel's appearance is created by swapping out textured plates in the existing Line 1 Press with smooth plates.

The smooth panels will exit the Line 1 Press and be cut to length using the existing saw line. From there, the panels will be transferred via forklift to a new finishing line (Smooth Panel Finishing Line). The new Smooth Panel Finishing Line will consist of conveyors and stackers, a curtain coater, drying ovens, a horizontal cooler and cooling tower, an edge primer spray booth, marking systems, and stacking, strapping and packaging equipment.

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The new equipment will be housed in the existing finishing building and installed adjacent to the existing Lap/Trim Finishing lines.

Panels will proceed through a curtain coater where they will be coated with an eggshell primer. The wet panels are then conveyed through an endothermic oven (Finishing Oven #7) and then through one of two parallel cross-transfer ovens (Finishing Ovens #8 and #9) for additional drying. All finishing ovens fire propane. The panels are then conveyed through a spray booth where primer is sprayed onto the exposed edges of the panels. The finished panels are graded, marked, stacked, and packaged for shipment.



#### F. 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 LP 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 Emissions 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

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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.

Neither the Line 1 Press nor the Central Heating Unit (CHU) will be modified or are considered affected units for the Smooth Panel Line Project. The Line 1 Press represents the bottleneck for panel production and finishing line operations. This project does not relieve that bottleneck. The press cycle times are the same whether it is producing textured or smooth panels. Changing the texture on the press plates is not expected to result in any increase in production rates or emissions. Therefore, since there is neither an expected increase in emissions per panel nor an increase in the number of panels produced, there is no expected increase in emissions from the Line 1 Press due to the Smooth Panel Line Project. There is also no expected increased usage of the CHU. With the same cycle times at the press, there is no expected increase in heat demand from the CHU.

The only equipment addressed by this license are new emission units. Baseline actual emissions for new equipment are considered to be zero for all pollutants; therefore, the selection of a baseline period 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)
Finishing Oven #7	0.2	0.2	0.2	neg	1.2	1.9	0.3
Finishing Oven #8	0.3	0.3	0.3	neg	1.9	3.1	0.4
Finishing Oven #9	0.3	0.3	0.3	neg	1.9	3.1	0.4
Smooth Panel Finishing Line (Coating Operations)	_	_	_	_	_	_	0.5
Total	0.8	0.8	0.8	neg	5.0	8.1	1.6

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#### 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	0.8	0.8	25
$PM_{10}$	0	0.8	0.8	15
$PM_{2.5}$	0	0.8	0.8	10
$SO_2$	0	_	0	40
$NO_x$	0	5.0	5.0	40
CO	0	8.1	8.1	100
VOC	0	1.6	1.6	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.

This NSR license is not licensing a new major stationary source of an NSR pollutant that is not greenhouse gases (GHG) nor is it authorizing a major modification for an NSR pollutant to an existing major stationary source. Therefore, greenhouse gases are not considered subject to regulation in this license pursuant to 40 C.F.R. §§ 51.166(b)(48)(iii - iv).

LP has submitted an application to incorporate the requirements of this NSR license into the facility's 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 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.

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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. Smooth Panel Finishing Line

This section addresses emissions of particulate matter, VOC, and HAP from the coating operations on the proposed Smooth Panel Finishing Line. Emission requirements for the ovens associated with this finishing line are addressed later in this document.

The Smooth Panel Finishing Line will use a curtain (flow) coater to apply an eggshell primer to the smooth panels. An edge primer will be applied using a high-pressure spray coating booth. Various marking systems apply small amounts of paint and ink.

#### 1. BACT Findings

a. Particulate Matter (PM, PM<sub>10</sub>, and PM<sub>2.5</sub>)

The curtain coating processes uses a metal box to transfer primer from a liquid bath to the product being coated. This type of coating does not generate emissions of particulate matter.

Primer will also be applied using either an automatic or manual spray paint booth. The paint booth will be enclosed and equipped with particulate filters. This is considered a highly effective control method for particulate matter from spray painting operations.

The Department finds the use of particulate filters and the visible emissions limit listed below to represent BACT for particulate matter emissions (PM, PM<sub>10</sub>, and PM<sub>2.5</sub>) from the Smooth Panel Finishing Line.

Visible emissions from any finishing line spray booth which vents outside shall not exceed 10% opacity on a 6-minute block average basis. LP shall demonstrate compliance with the visible emissions limit through performance testing upon request of the Department.

LP shall keep records of the dates the particulate filters are replaced on the Smooth Panel Finishing Line spray booth.

#### b. Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP)

Emissions of VOC and HAP from the Smooth Panel Finishing Line are directly proportional to the VOC/HAP content of the products applied. Finishing lines are

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subject to state and federal regulations limiting the amount of VOC and HAP in the coatings.

Surface Coating Facilities, 06-096 C.M.R. ch. 129, contains applicable limits for the VOC content of the coatings applied along with work practice standards for the minimization of VOC emissions.

National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products, 40 C.F.R. Part 63, Subpart DDDD, contains applicable limits for the HAP content of the coatings applied.

All of the products that will be used are considered to have a low VOC/HAP content. The existing finishing equipment is subject to an emission limit of 34.9 tpy on a 12-month rolling total basis. LP has proposed to include emissions from the new Smooth Panel Finishing Line in this existing annual limit.

The Department finds an annual VOC limit of 34.9 tpy on a 12-month rolling total basis for the Main Line Spray Booth, Primer Finish Line, and Smooth Panel Finishing Line combined and compliance with the most current versions of 06-096 C.M.R. ch. 129 and 40 C.F.R. Part 63, Subpart DDDD to represent BACT for VOC and HAP emissions for the Smooth Panel Finishing Line.

#### 2. Periodic Monitoring

The following periodic monitoring is required for the Smooth Panel Finishing Line as part of this NSR licensing action. (Additional periodic monitoring may be required for reasons other than NSR and are already addressed in LP's Part 70 license.)

- a. Dates the particulate filters are replaced on the spray booth; and
- b. Monthly calculations of VOC use for the Main Line Spray Booth, Primer Finish Line, and Smooth Panel Finishing Line.

#### 3. Surface Coating Facilities, 06-096 C.M.R. ch. 129

The Smooth Panel Finishing Line will be subject to *Surface Coating Facilities*, 06-096 C.M.R. ch. 129 under the category of "surface coating of flatwood paneling." The definition of "flatwood paneling coating line" includes coating lines which apply and dry or cure coatings to exterior siding.

#### a. Emission Limitations

Actual VOC emissions from the facility's finishing lines are expected to exceed 2.7 tpy. As such, the emission limitations in Section 4 of 06-096 C.M.R. ch. 129

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are applicable. LP has elected to comply with Control Option 1, use of low-solvent content coatings.

LP is limited to using coatings with a VOC content equal to or less than 2.1 lb VOC per gallon of coating (excluding water and exempt compounds), as applied and 2.9 lb VOC per gallon of solids, as applied. [06-096 C.M.R. ch. 129, § 4(E)] "Exempt compounds" are those specifically defined as not being a VOC per the definition of VOC in 06-096 C.M.R. ch. 100.

### b. Handling, Storage, and Disposal of Materials Containing VOC

LP is subject to the work practice standards contained in Section 5 of 06-096 C.M.R. ch. 129. These requirements include:

(1) Vapor-tight containers shall be used for the storage of spent or fresh VOC [containing materials] and for the storage or disposal of cloth or paper impregnated with VOC that are used for surface preparation, clean up, or coating removal.

#### (2) Cleanup Operations

- (i) The use of VOC [containing materials] is prohibited for cleanup operations unless equipment (e.g., a closed container) is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere.
- (ii) LP shall collect all organic solvent used to clean spray guns into a container that remains closed except when material is being added or removed.
- (iii)LP shall pump or drain all organic solvent used for line cleaning into a normally closed container.
- (iv)LP shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyers, continuous coaters and their enclosures, and/or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, LP may not use more than 1.0 gallon of organic solvent to prepare the booth prior to applying the booth coating.
- (v) LP shall control emissions from washoff operations by:
  - 1. Using normally closed tanks for washoff; and
  - 2. Minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.

#### c. Recordkeeping and Reporting

(1) LP shall submit to the Department an initial compliance certification upon startup of each new coating unit, line, or operation. [06-096 C.M.R. ch. 129 § 7(A)]

The initial certification shall contain the following information:

- (i) Name and location of the facility;
- (ii) Name, address, and telephone number of the facility's Responsible Official;
- (iii)Identification of each coating used on each coating line;
- (iv) The mass of VOC per volume of each coating (e.g., lb VOC/gal), excluding water and exempt compounds, as applied, expected to be used each day on each coating line; and
- (v) The time at which the facility's "day" begins if a time other than midnight is used to define a "day."

[06-096 C.M.R. ch. 129, § 7(A)(2)]

- (2) LP shall keep records of the following:
  - (i) Name and identification of each coating; and
  - (ii) Mass of VOC per volume (e.g., lb VOC/gal), excluding water and exempt compounds, as applied used each month.

[06-096 C.M.R. ch. 129, § 7(B)(2)]

- (3) LP shall notify the Department in writing within thirty (30) calendar days of the use of any coatings that do not meet the VOC content limit. [06-096 C.M.R. ch. 129, § 8(B)(2)]
- 4. Architectural and Industrial Maintenance (AIM) Coatings, 06-096 C.M.R. ch. 151

This project will not make LP subject to *Architectural and Industrial Maintenance* (AIM) Coatings, 06-096 C.M.R. ch.151. This regulation applies to the manufacture, sale, and application of architectural coatings. Architectural coating is defined as follows:

"Architectural coating" means a coating to be applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of this rule.

LP does not propose to apply coatings to stationary structures or portable buildings at the site of installation.

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5. National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products, 40 C.F.R. Part 63, Subpart QQQQ

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National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products, 40 C.F.R. Part 63, Subpart QQQQ, is not applicable to the Smooth Panel Finishing Line. This equipment is in the subcategory "exterior siding and primed doorskins."

The affected source is a collection of all coating operations and equipment (both automatic and manual) and storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed. [40 C.F.R. § 63.4682(b)]

This regulation does <u>not</u> apply to the application of edge seals, primers, and other markings such as logos and grade stamps. [40 C.F.R. § 63.4681(c)(1)] LP does not propose to conduct any surface coating on the Smooth Panel Finishing Line except as exempted under this section. Therefore, the Smooth Panel Finishing Line is not subject to 40 C.F.R. Part 63, Subpart QQQQ.

NSR license A-327-77-5-A (issued 3/5/2021) stated that the Specialty Finish Coating Line and the Miscellaneous Product Finishing Line were subject to 40 C.F.R. Part 63, Subpart QQQQ, based on the assumption that non-exempt adhesives, caulks, and coatings would be applied to products on those lines. Those processes were never installed. Therefore, none of the fishing lines at LP are subject to 40 C.F.R. Part 63, Subpart QQQQ.

6. National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products, 40 C.F.R. Part 63, Subpart DDDD

LP is subject to *National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products*, 40 C.F.R. Part 63, Subpart DDDD. LP is a plywood and composite wood products manufacturing facility which is a major source of HAP. The affected source under Subpart DDDD includes, but is not limited to finishing operations.

Spray booths used to apply edge seal and primer meet the definition of "group 1 miscellaneous coating operations."

The Finishing Line Spray Booths shall use only non-HAP coatings. [40 C.F.R. § 63.2241(a) and Table 3]

Non-HAP coatings are defined as coatings with HAP contents below 0.1% by mass for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 C.F.R. § 1910.1200(d)(4) and below 1.0% by mass for other HAP compounds.

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# C. Finishing Line Ovens

All products processed through the Smooth Panel Finishing Line will pass through Finishing Oven #7 (Endo Oven) that has propane burners totaling 5.25 MMBtu/hr. The line will then split into two lanes in parallel. Each lane has a CT Oven (Finishing Line Oven #8 and Finishing Line Oven #9). The CT Ovens each have propane burners totaling 8.75 MMBtu/hr.

All of the Finishing Line Ovens are designed to fire propane and are referred to collectively as finishing ovens.

#### 1. BACT Findings

Following is a BACT analysis for control of emissions from the finishing ovens.

#### a. Particulate Matter (PM, PM<sub>10</sub>, PM<sub>2.5</sub>)

LP has proposed to burn only a low-ash content fuel (propane) in the finishing ovens. Additional add-on pollution controls are not economically feasible.

BACT for PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions from the finishing ovens is the use of propane as a fuel and the emission limits listed in the table below.

### b. Sulfur Dioxide (SO<sub>2</sub>)

LP has proposed to fire only propane, an inherently low-sulfur fuel. The use of this fuel results in minimal emissions of SO<sub>2</sub>, and additional add-on pollution controls are not economically feasible.

BACT for SO<sub>2</sub> emissions from the finishing ovens is the use of propane. Emissions of SO<sub>2</sub> from these units are determined to be negligible.

### c. Nitrogen Oxides (NO<sub>x</sub>)

The finishing line ovens will all be equipped with low- $NO_x$  burners (LNBs) which minimize the formation of  $NO_x$  by improving fuel/air mixing. The use of add-on control technologies for propane-fired units of such a small size is not economically feasible.

BACT for NO<sub>x</sub> emissions from the finishing ovens is the use of propane, LNBs, and the emission limits listed in the table below.

# d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

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Emissions of CO and VOC can be reduced by using oxidation catalysts or thermal oxidizers. Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the emission unit in question. These controls were determined to not be economically feasible.

BACT for CO and VOC emissions from the finishing ovens is the use of propane and the emission limits listed in the table below.

#### e. Emission Limits

The BACT emission limits for the finishing ovens were based on the following:

PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.7 lb/1,000 gal based on AP-42 Table 1.5-1 dated 7/08 NO<sub>x</sub> – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT and manufacturer's specifications

CO - 7.5 lb/1,000 gal based on AP-42 Table 1.5-1 dated 7/08 VOC - 1.0 lb/1,000 gal based on AP-42 Table 1.5-1 dated 7/08

Visible Emissions - 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for the finishing ovens are the following:

Unit	Pollutant	lb/MMBtu
Finishing Line Ovens #7 - #9 (each)	PM	0.008

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Finishing Line Ovens #7	0.04	0.04	0.04	0.26	0.43	0.06
Finishing Line Ovens #8 - #9 (each)	0.07	0.07	0.07	0.44	0.72	0.10

LP shall demonstrate compliance with the emission limits above through performance testing upon request of the Department.

#### 2. Visible Emissions

Visible emissions from each of the finishing ovens shall not exceed 10% opacity on a six-minute block average basis.

LP shall demonstrate compliance with the visible emission limit through performance testing upon request of the Department.

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

Due to their size and not being "steam generating units," the finishing ovens are 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]

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

The finishing ovens do not meet the definition of either *boiler* or *process heater* in 40 C.F.R. § 63.7575 since they are direct-fired heating sources where the combustion gases come into direct contact with the process materials. Therefore, the finishing ovens are not subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, 40 C.F.R. Part 63, Subpart DDDDD.

#### D. 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. LP has applied to amend their Part 70 license for the inclusion of requirements of this NSR license.

#### E. 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 and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- CHU TOS operating for 8,760 hr/year at licensed lb/hr limits. VOC converted from "as carbon" to "as propane plus formaldehyde.";
- Operation of the Dryers for 8,760 hr/year at licensed lb/hr limits. VOC converted from "as carbon" to "as propane plus formaldehyde.";
- Operation of the LSL Press for 8,550 hr/year at licensed lb/hr limits. VOC converted from "as carbon" to "as propane plus formaldehyde.";
- Operation of the Line 1 Press for 8,760 hr/year at licensed lb/hr limits. VOC converted from "as carbon" to "as propane plus formaldehyde.";

- Assumes LSL Press and Line 1 Press lines cannot run simultaneously. The emissions shown in the table below are based on the worst-case operating scenario (Line 1 Press or LSL Press) using licensed emission limits and hours of operation noted here;

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- Annual PM and VOC emission limits on the Dry Wafer Storage Bins and LSL Flying Cut-off Saw;
- Annual VOC emission limit on the LSL Edge Seal Process;
- Annual combined VOC emission limit on the Main Line Spray Booth, Primer Finish Line, and Smooth Panel Finishing Line;
- Operation of all finishing line oven burners for 8,760 hr/year at licensed lb/hr limits; and
- Operation of the emergency engines for 100 hr/year.

This information does not 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>	NOx	CO	VOC1
CHU – TOS Stack	20.1	20.1	16.7	154.0	154.0	4.3
CHU – Dryer Vent Stack (RTO Stack)	68.3	68.3	1.9	144.1	477.4	24.0
Dry Wafer Storage Bins	0.5	0.5	_	_	_	3.1
LSL Flying Cut-off Saw	2.5	2.5	_	_	_	8.6
LSL Press	_	_	_	_	_	32.6
Line 1 Press	53.9	53.9	6.6	89.8	42.0	_
LSL Edge Seal	_	_	_	_	_	1.1
Fire Pump	_	_	_	0.3	0.1	_
TOS Backup Pump	_	_	_	0.1	_	_
Finishing Line Ovens #1-#4	0.7	0.7	0.1	4.4	7.2	1.0
Finishing Line Ovens #5-#6	0.4	0.4	_	2.8	4.6	0.6
Finishing Line Oven #7	0.2	0.2	_	1.2	1.9	0.3
Finishing Line Ovens #8-#9	0.6	0.6	_	3.8	6.2	0.8
Finishing Lines <sup>2</sup>						34.9
Total TPY	147.2	147.2	25.3	400.5	693.4	111.3

<sup>&</sup>lt;sup>1</sup> All VOC emissions are listed as propane plus formaldehyde.

<sup>&</sup>lt;sup>2</sup> Includes the Main Line Spray Booth, Primer Finish Line, and Smooth Panel Finishing Line.

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### III. AMBIENT AIR QUALITY ANALYSIS

LP previously submitted an ambient air quality impact analysis outlined in air emission license A-327-77-1-N (issued 8/26/2006) 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.

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This determination is based on information provided by the applicant regarding the expected construction and operation of the proposed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require LP to submit additional information and may require an ambient air quality impact analysis at that time.

#### **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-327-77-9-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 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**

The following shall replace Condition (2) of NSR License A-327-77-5-A (3/5/2021).

## (1) **Finishing Lines**

A. Emissions of VOC from the Main Line Spray Booth, Primer Finish Line, and Smooth Panel Finishing Line (combined) shall not exceed 34.9 tpy (12-month rolling total basis). Compliance shall be demonstrated by monthly calculations of VOC use for the Main Line Spray Booth, Primer Finish Line, and Smooth Panel Finishing Line. [06-096 C.M.R. ch. 115, BACT]

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- B. Visible emissions from any finishing line spray booth which vents outside shall not exceed 10% opacity on a 6-minute block average basis. Upon request by the Department, LP shall demonstrate compliance with the visible emission limit through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 9. [06-096 C.M.R. ch. 115, BACT]
- C. LP shall keep records of the dates the particulate filters are replaced on the spray booth. [06-096 C.M.R. ch. 115, BACT]

The following Conditions (2) and (3) address applicable requirements unrelated to NSR and shall expire upon incorporation of this NSR license into LP's Part 70 air emission license:

# (2) Chapter 129 Requirements for the Smooth Panel Finishing Line

#### A. Emission Standards

LP shall only use coatings with a VOC content equal to or less than 2.1 lb VOC per gallon of coating (excluding water and exempt compounds), as applied and 2.9 lb VOC per gallon of solids, as applied. [06-096 C.M.R. ch. 129, § 4(E)] "Exempt compounds" are those specifically defined as not being a VOC pursuant to the definition of VOC in 06-096 C.M.R. ch. 100.

#### B. Handling, Storage, and Disposal of Materials Containing VOC

1. Vapor-tight containers shall be used for the storage of spent or fresh VOC [containing materials] and for the storage or disposal of cloth or paper impregnated with VOC that are used for surface preparation, clean up, or coating removal. [06-096 C.M.R. ch. 129, § 5(A)]

## 2. Cleanup Operations

- a. The use of VOC [containing materials] is prohibited for cleanup operations unless equipment (e.g., a closed container) is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere.
- b. LP shall collect all organic solvent used to clean spray guns into a container that remains closed except when material is being added or removed.
- c. LP shall pump or drain all organic solvent used for line cleaning into a normally closed container.
- d. LP shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyers, continuous coaters and their enclosures, and/or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, LP may not

use more than 1.0 gallon of organic solvent to prepare the booth prior to applying the booth coating.

- e. LP shall control emissions from washoff operations by:
  - (1) Using normally closed tanks for washoff; and
  - (2) Minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.

[06-096 C.M.R. ch. 129, § 5(B)]

### C. Recordkeeping

LP shall operate, record data, and maintain records from the following periodic monitors for the Smooth Panel Finishing Line:

- 1. Name and identification of each coating used;
- 2. Mass of VOC per volume (e.g., lb VOC/gal), excluding water and exempt compounds, for each coating as applied; and
- 3. Amount of each coating used each month.

[06-096 C.M.R. ch. 129, § 7(B)(2)]

# D. Reporting

1. LP shall submit to the Department an initial compliance certification upon startup of the Smooth Panel Finishing Line.

[06-096 C.M.R. ch. 129, § 7(A)]

- 2. The initial certification shall contain the following information:
  - a. Name and location of the facility;
  - b. Name, address, and telephone number of the facility's Responsible Official;
  - c. Identification of each coating used on each coating line;
  - d. The mass of VOC per volume of each coating (e.g., lb VOC/gal), excluding water and exempt compounds, as applied, expected to be used each day on each coating line; and
  - e. The time at which the facility's "day" begins if a time other than midnight is used to define a "day."

[06-096 C.M.R. ch. 129, § 7(A)(2)]

3. LP shall notify the Department in writing within thirty (30) calendar days of the use of any coatings that do not meet the VOC content limit.

[06-096 C.M.R. ch. 129, § 8(B)(2)]

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### (3) 40 C.F.R. Part 63, Subpart DDDD

LP shall use only non-HAP edge seal and primer coatings. Records of the HAP content of the material used shall be maintained to document compliance. [40 C.F.R. § 63.2241(a) and Table 3]

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Non-HAP coatings are defined as coatings with HAP contents below 0.1% by mass for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in section A.6.4 of appendix A to 29 C.F.R. § 1910.1200 and below 1.0% by mass for other HAP compounds.

The following shall replace Condition (3) of NSR License A-327-77-5-A (3/5/2021).

## (4) **Finishing Line Ovens**

- A. The finishing line ovens shall only fire propane. [06-096 C.M.R. ch. 115, BACT]
- B. The finishing line ovens shall each be equipped with low-NO $_x$  burners. [06-096 C.M.R. ch. 115, BACT]
- C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

Unit	Pollutant	lb/MMBtu
Finishing Line Ovens #1 - #9 (each)	PM	0.008

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

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Finishing Line Ovens #1 - #4 (each)	0.04	0.04	0.04	0.25	0.41	0.05
Finishing Line Ovens #5 - #6 (each)	0.05	0.05	0.05	0.32	0.52	0.07
Finishing Line Ovens #7	0.04	0.04	0.04	0.26	0.43	0.06
Finishing Line Ovens #8 - #9 (each)	0.07	0.07	0.07	0.44	0.72	0.10

E. Visible emissions from each of the finishing line ovens shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

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F. LP shall demonstrate compliance with the emission limits above through performance testing upon request of the Department. [06-096 C.M.R. ch. 115, BACT]

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- (5) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, LP may be required to submit additional information. Upon written request from the Department, LP shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter.

  [06-096 C.M.R. ch. 115, § 2(O)]
- (6) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]

Done and dated in augusta, maine this  $8^{th}$  day of AUGUST, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

MELANIE LOYZIM, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

for

Date of initial receipt of application: 5/7/2024

Date of application acceptance: 5/9/2024

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

# **FILED**

AUG 08, 2024

State of Maine Board of Environmental Protection