



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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**Louisiana-Pacific Corporation
Aroostook County
New Limerick, Maine
A-327-70-I-R**

**Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal**

FINDINGS OF FACT

After review of the Part 70 License renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

| | |
|--------------------|---|
| FACILITY | Louisiana-Pacific Corporation |
| LICENSE TYPE | Part 70 License Renewal |
| NAICS CODES | 321219 |
| NATURE OF BUSINESS | Oriented Strand Board Manufacturer |
| FACILITY LOCATION | 240 Station Road New Limerick, Maine |

Louisiana-Pacific Corporation (LP) owns and operates an Oriented Strand Board (OSB) and Laminated Strand Lumber (LSL) production facility located in New Limerick, Maine.

LP has the potential to emit more than 100 tons per year (TPY) of particulate matter (PM), Particulate Matter under 10 micrometers (PM₁₀), particulate matter under 2.5 micrometers (PM_{2.5}), nitrogen oxides (NO_x), and carbon monoxide (CO) and more than 50 TPY of volatile organic compounds (VOC) and more than 100,000 tons of carbon dioxide equivalent (CO₂e); therefore, the source is a major source for criteria pollutants. LP has the potential to emit more than 10 TPY of a single hazardous air pollutant (HAP) or more than 25 TPY of combined HAP, therefore, the source is a major source for HAP.

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Fuel Burning Equipment

| Equipment | Maximum Heat Input Capacity (MMBtu/hr) | Fuel Type, % sulfur | Manuf. Date | Install. Date |
|----------------------------|---|--|--------------------|----------------------|
| Central Heating Unit (CHU) | 278 | Bark, wood, mill trimmings Negligible | 2007 | 2008 |
| Dryer RTO | 13.5 | Propane/Natural Gas Negligible | 2007 | 2007 |
| Press RCO/RTO | 11.2 | Propane/Natural Gas Negligible | 1999 | 1999 |
| Fire Pump | 1.2 | Diesel fuel 0.0015% | 1981 | 1982 |
| TOH Backup Pump | 0.3 | Diesel fuel 0.0015% | 2007 | 2007 |

Process Equipment

| Equipment | Description | Pollution Control Equipment |
|----------------------------------|--|------------------------------------|
| Dryers (2) | Uses exhaust gases from CHU to dry strands/wafers at a max rate of 15.25 Oven Dried Ton (ODT)/hr | Wet ESP, RTO |
| Dry Wafer Storage Bins (2) | Dry strand/wafer storage | Baghouse |
| OSB/LSL Flying Cutoff Saws | Cut the mats to length before they enter the presses | Baghouse |
| OSB Press | Uses heat from thermal oil and pressure to bind wafers together | RCO/RTO |
| LSL Press | Uses steam and pressure to bind strands together | N/A |
| Pneumatic Systems | Transfers material around the facility | Baghouses |
| LSL Edge Seal / OSB Spray Booths | Surface treatments for finished product | N/A |

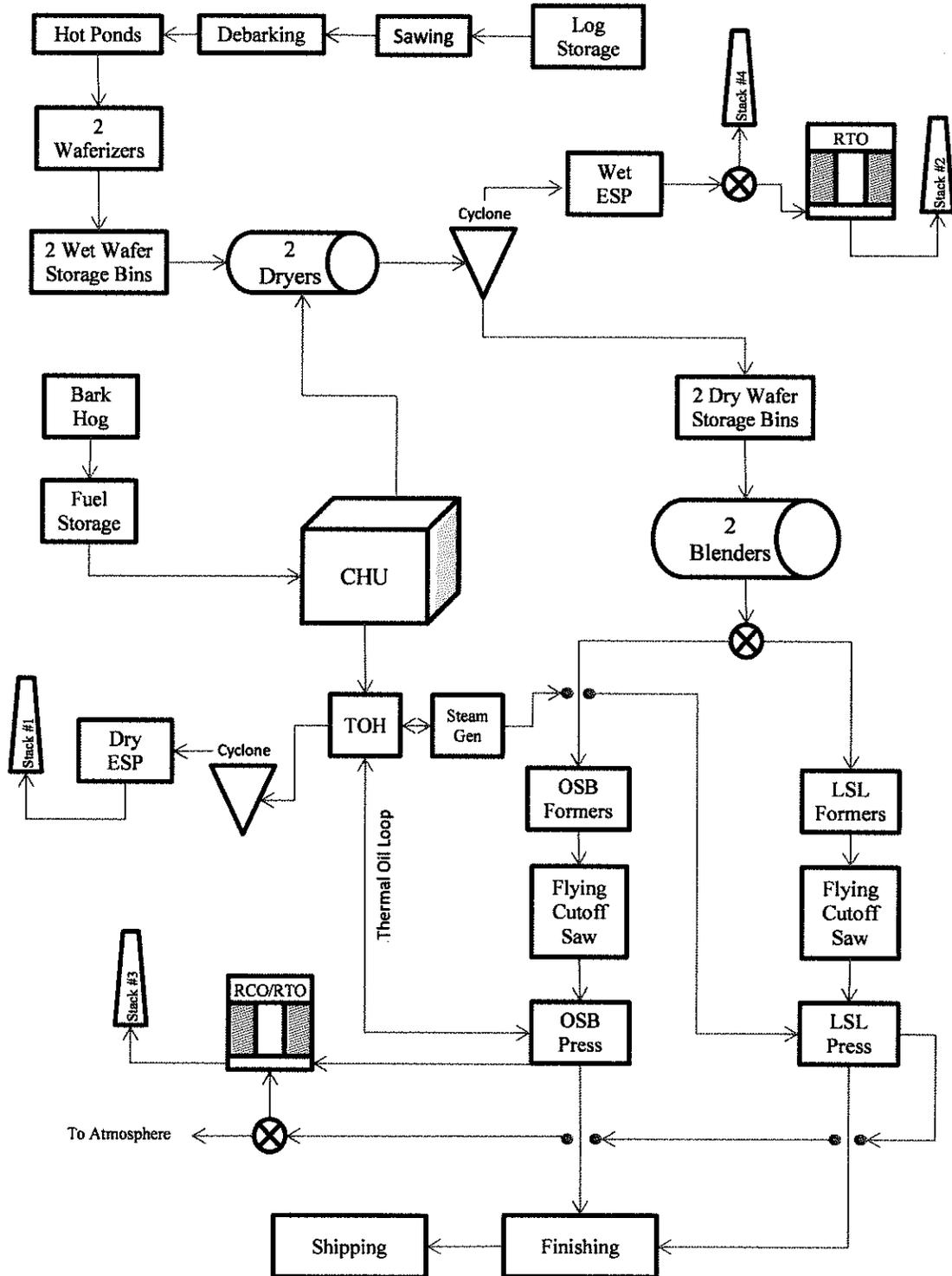
LP has additional insignificant activities which do not need to be listed in the emission equipment tables above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended).

C. Application Classification

The application for LP is for the renewal of their existing Part 70 Air License and subsequent Part 70 amendments. Pursuant to Section 2(A) of 06-096 CMR 140, LP has also requested incorporation into the Part 70 Air License the relevant terms and conditions of the 06-096 CMR 115 New Source Review (NSR) licenses issued to LP, including A-327-77-1-N issued 9/28/06, A-327-77-2-A issued 9/6/07, A-327-77-3-A issued 5/14/10, and A-327-77-4-A issued 4/24/13. Therefore, the license is considered to be a Part 70 License renewal with the incorporation of NSR requirements.

[Continued on next page]

D. Facility Description



LP owns and operates an Oriented Strand Board (OSB) and Laminated Strand Lumber (LSL) manufacturing facility. (LSL is the terminology that is currently used. Terminology used to describe the same process in previous applications and air emission licenses include Oriented Strand Lumber (OSL) and Solid Start Strand Lumber (SSSL).)

The facility underwent a new source review (NSR)/prevention of significant deterioration (PSD) licensing process in September of 2006 allowing the installation and operation of the LSL process. The licensing of the LSL project and associated equipment allows LP to manufacture LSL products in addition to OSB products. The LSL process became operational in 2008 after it was integrated into the existing OSB process infrastructure, incorporating process equipment common to both LSL and OSB production where possible. Completion of the LSL project allows LP to produce various lengths, widths, thicknesses, and mechanical properties of LSL to meet changing market conditions.

The following paragraphs provide more detailed descriptions of the facility's major areas, processes, and systems as they currently exist and identify changes that occurred at the facility as a result of completion of the LSL project.

Green End Area

The Green End Area operations remained essentially unchanged from operations prior to completion of the LSL project and begin with trucks bringing harvested logs, primarily aspen (also known as poplar) and maple, to the facility. Wood is received in log lengths (from 9' long to tree length) and used in the order of receipt to allow for uniform aging of the wood. Logs are cut to a maximum length of 9' with saws and then fed to a debarker.

The logs are debarked, conveyed through hot log conditioning ponds, and sent to one of two waferizers to produce the wafers (or strands) of wood that are used in either the LSL or OSB production processes. The different strand size needs of the LSL process compared to the OSB process required the installation of new batch feeder equipment leading to the waferizers.

The wet strands produced by the waferizers are then conveyed to either one of two wet wafer storage bins prior to being dried in either one of two single-pass Rotary Dryers.

The bark removed from the logs during the debarking process as well as broken ends, small ends, and wood waste generated in the Green End Area are collected by a series of conveyors and sent to the bark hog before being used as fuel in the Central Heating Unit (CHU). The CHU was installed as part of the LSL project to replace the direct firing capabilities of the Rotary Dryers and the Thermal Oil

Heaters (#1 and #2) by generating heat for use in the Rotary Dryers as well as heat for the Thermal Oil System (TOS).

Dust formation in the Green End Area of the facility is minimal due to the nature of the material (i.e., green wood with a typical moisture content of approximately 50%, by weight).

Central Heating Unit (CHU) and Thermal Oil System (TOS)

LP installed a Central Heating Unit (CHU) as part of the LSL project to improve the energy efficiency of the facility's manufacturing processes and building heating systems. The existing Thermal Oil Heaters #1 and #2, which provided heat to the Thermal Oil System (TOS), were no longer needed following the start-up and shakedown of the CHU and so were permanently shut down, dismantled and removed from the facility.

The CHU is a wood-fired unit with a design heat input capacity of 278 MMBtu/hr. The exhaust stream from the CHU is split into two distinct streams based upon heat demand load.

One exhaust stream, referred to as the "CHU – Dryers" exhaust stream, provides direct-contact heat to the Rotary Dryers (typically representing between 30% and 40% of the heat generated by the CHU). The CHU – Dryers exhaust stream passes through the Rotary Dryers and is sent through each dryer's centrifugal cyclone and a single wet electrostatic precipitator (WESP) for control of PM emissions before being routed through a regenerative thermal oxidizer, referred to as the Dryer RTO, for control of CO, VOC, and HAP emissions. Emissions exhaust through Stack #2.

The other exhaust stream, referred to as the "CHU – TOS" exhaust stream, provides indirect-contact heat to the TOS (typically representing between 60% and 70% of the heat generated by the CHU). The TOS provides heat for the OSB press, buildings, log ponds, and a steam generator. The steam generator produces steam for use in the LSL Press. The CHU – TOS exhaust stream is sent to a multiple centrifugal cyclone followed by a dry electrostatic precipitator (ESP) for control of PM emissions and discharged to the ambient air through Stack #1.

Dryers

Wet strands from the wet wafer storage bins are transferred to one of two Rotary Dryers. In the OSB process one of the Rotary Dryers, referred to as the Surface Line Dryer, is used to dry the wet wafers to be used as the top and bottom surface of the final board, while the second Rotary Dryer, referred to as the Core Line Dryer, is used to dry the wet wafers to be used in the core of the final board. The only difference between the wafers dried in the Core Line Dryer compared to the wafers dried in the Surface Line Dryer is in the moisture content. In the Core Line

Dryer, the moisture content of the wafers is typically reduced to less than 3%, by weight and in the Surface Line Dryer, the moisture content of the wafers is typically reduced to less than 2%, by weight.

Both Rotary Dryers are used to dry the wet strands for use in the LSL process. As part of the LSL project, the existing wood-fired suspension burners and back-up oil-fired burners previously used to provide heat for the Rotary Dryers were removed. Direct heat to the Rotary Dryers is now provided by the CHU – Dryers exhaust stream. The exhaust from each Rotary Dryer is routed through a centrifugal cyclone where the strands and fines are separated from the exhaust gases. In order to maintain a good air flow balance throughout the system, a portion of the exhaust stream from each cyclone is recirculated, some back into the Rotary Dryer inlets and some back into the CHU.

Each centrifugal cyclone is followed by a WESP, which removes particles from the exhaust gas using an electric charge. The electrodes of the WESP impart a charge on the particles and then the particles are attracted to oppositely-charged metal collection plates. In a WESP, the collected particles are removed from the metal collection plates with water. LP uses the water collected in the WESPs either by adding it to the hot log conditioning ponds or to wet the fuel entering the CHU to provide more consistent combustion.

The WESP is followed by the Dryer RTO for the control of CO, VOC, and HAP emissions. The exhaust gas enters through a packed bed of heated ceramic saddles, which preheat the gas. Once through the saddles, the gas enters the Dryer RTO's combustion chamber (or firebox). Here pollutants are incinerated and converted to carbon dioxide and water. The gases then pass through another layer of packed ceramic saddles where the heat in the gases is transferred back to the saddles. The gases then pass through a valve and are drawn through a fan and discharged to the ambient air through Stack #2.

During operation of the Dryer RTO, condensed particles accumulate on the ceramic saddles causing the pressure drop across the control device to increase. As a result, the Dryer RTO must undergo a bake-out process to clean the ceramic saddles and decrease the pressure drop across the unit. During the bake-out process, the Dryer RTO is taken off line and the temperature of the ceramic saddles is heated until excess material coating the ceramic is burned off.

LP has a bypass system for the Dryer RTO that is used in emergency situations. In an emergency, exhaust gases from the WESPs bypass the Dryer RTO and are vented directly to the atmosphere through Stack #4.

Screening/Blending

After the drying process, wafers discharged from the centrifugal cyclones are conveyed into two dry wafer screens (a new screen was installed as part of the LSL project). The screens remove fines, which are conveyed to various baghouses where they are collected to be used as fuel in the CHU.

The screened dried wafers are then conveyed to either one of two dry wafer storage bins and then sent to either one of two blenders, where resin and wax are mixed with the strands of dried wood.

The amount of resin and wax added in the blenders depends on the desired final product characteristics. To accommodate an increase in resin use required for the production of LSL, two new methylene-diisocyanate (MDI) storage tanks were added providing the same amount of storage capacity as the two existing MDI storage tanks (19,000 gallons, each). All of the MDI storage tanks are considered insignificant activities and so are not addressed further in this license.

Dust generated from the screening process and dry wafer storage bins is collected and conveyed to various baghouses as described in the Pneumatic Systems section below.

Forming Lines

Following the blenders, new diverter gates were installed to direct strands to either the OSB forming line or the LSL forming line. In the LSL forming line, strands are oriented properly and formed into mats. Flying cutoff saws are used to cut the mats to proper size, and the sized mats are conveyed to the LSL Press. Any mats that are poorly formed are sent to a material reject system and recycled back into the process.

The OSB forming line operates in much the same way. Wafers are metered from the formers onto a continuous moving screen line system which is a nominal 8' wide. The formed wafer mats are separated into nominal 16' lengths and then deposited into the OSB Press by the press loader, which accumulates 12 mats prior to loading the press.

Rejected material from the forming processes is recycled back into the process. Dust from these forming lines is collected via pick-up points along the process lines and pneumatically conveyed to various baghouses.

Press Operations

Acceptable mats from the LSL forming line are sent to the LSL Press. The LSL Press is a steam injection, single-opening type press which makes LSL products with a nominal design thickness of up to 3½ inches. The acceptable mats are transferred to press platens and taken into the press, where steam is injected into

the furnish, both curing the board and heating the press. The press activates the applied resin and bonds the product into a single solid entity. After the pressing cycle is complete, the pressed boards, referred to as billets, are sent to the finishing area.

LP has the physical capability to treat the exhaust from the LSL Press in the existing regenerative catalytic oxidizer/regenerative thermal oxidizer (RCO/RTO), referred to as the Press RCO/RTO. (This is the same control device used to treat the exhaust from the OSB Press when it is being operated.) However, LP has demonstrated, to the Department's satisfaction, that the emissions are low enough that the RCO/RTO is not a cost effective treatment option. Therefore, LP is not required to operate the RCO/RTO for control of emissions from the LSL Press.

Steam utilized by the LSL Press is supplied by a steam generator heated by the thermal oil system (TOS), which receives indirect heat from the CHU. The platens on the press are heated indirectly by the TOS, as well. Also, a release agent is sprayed on the bottom face conveying surface of the press screen and the top face surface of the mat furnish to prevent material from sticking to these surfaces.

The OSB Press operates in much the same way. The OSB Press includes the necessary hydraulic equipment, heating oil circulation system, and controls to manufacture the products as desired. The OSB Press utilizes heated oil instead of steam to heat and cure the board. Emissions from the OSB Press are controlled by the Press RCO/RTO.

Cooling and Finishing Area

Upon exiting the LSL Press, trim saws are used to remove excess edges and ends from the billets. Acceptable billets are conveyed to a wicket-type cooler. After cooling, the billets are stacked and sent to finishing.

Reject billets are either sold as off spec material, recycled back into the process, or hogged for use as fuel in the CHU. In the Finishing Area, a series of conveyors and saws are used to create various LSL products, such as studs, headers/beams, and posts. A sander is used to smooth the billets, and a rip saw is used to cut the billets to the proper width. The LSL products are then stacked, marked, and strapped together for shipment. The product can also be sent to additional cut-to-length and cut-to-width saws prior to shipment. Dust formed during the finishing process is collected via pick-up points along the process line and pneumatically conveyed to the Finishing Area Baghouse. Excess material from the saw line is sent through a trim hog for possible use as fuel in the CHU.

The OSB Cooling and Finishing Area functions in a similar way. The finished rough boards are ejected from the OSB Press unloader and travel through a trim saw where they are cut into two 4' x 16' panels, then under a transfer saw where the 4'x16' panels are reduced to 4'x 8' panels. The saw system has the ability to make any size boards up to 8' x 16' based on customer orders. The trimmed boards are conveyed to the grade line where they are edge sealed, banded, and placed in the warehouse for shipment. All dry trim material and sawdust is reclaimed by the Pneumatic System for use as fuel in the CHU.

LSL Edge Seal Process & OSB Edge Seal Process

The LSL Edge Seal Process is where edge seal materials are applied to the cut edges of LSL products to minimize the amount of moisture entering into the edge of the product.

NSR Air Emission License A-327-77-2-A included the addition of an edge seal material to every LSL product. The incorporation of the LSL Edge Seal Process resulted in a small increase in VOC emissions from the facility. Potential VOC emissions from the LSL Edge Seal Process were determined to be 1.1 TPY. This annual emission rate was based on a maximum usage of 100,000 gallons per year of a specific edge seal material having a VOC content of 0.0214 pounds per gallon.

In Air Emission License A-327-77-2-A, the Department determined that other low VOC content edge seal materials may be used provided VOC emissions from the LSL Edge Seal Process do not exceed 1.1 TPY. LAER and subsequently BACT for the LSL Edge Seal Process was determined to be the use of good engineering practice in operation of the three spray booths associated with the LSL Edge Seal Process and the use of edge seal materials with low VOC content.

All three spray booths are enclosed and operate automatically and under negative pressure. A paper-type pre-filter and a secondary bag-type filter on the air outlet of each spray booth trap particulate matter prior to venting inside the building.

The OSB Edge Seal Process operates in much the same way as the LSL Edge Seal Process except that it involves two spray booths to apply edge seal materials to OSB products. In one spray booth, edge seal materials are applied to OSB to be sold as wall board. This spray booth is located after the saws on the main forming line. The second spray booth is used to apply edge seal materials to OSB to be sold as flooring. This spray booth is located after the sander on the finishing line. Both spray booths are enclosed and operate automatically and under negative pressure. A paper-type pre-filter and a secondary bag-type filter on the air outlet trap particulate matter prior to venting inside the building. The edge seal materials applied in the OSB spray booths contain small quantities of VOC but no HAPs.

VOC emissions from the application of all edge seal materials for the two OSB spray booths combined is limited to 2.9 TPY. LP minimizes VOC emissions from the OSB Edge Seal Process by using edge seal materials with low VOC content.

Pneumatic Systems

Materials, including fines, sawdust, and dust generated by various processes, storage bins, and conveying systems located at the facility, are collected by several Pneumatic Systems made up of enclosures, ductwork, fans, and baghouses for reuse in the process or as fuel for the CHU. LP made modifications to the existing pneumatic systems and installed new pneumatic systems as part of the LSL project. Three new baghouses were installed and one existing baghouse was relocated outdoors. The new and relocated baghouses associated with the LSL project included:

- Dry Fuel Silo Baghouse (System 5 Baghouse) – atop the new dry fuel storage bin
- Dry Bin/LSL Forming Baghouse (System 7 Baghouse) – south of the OSB Formers
- Finishing Area Baghouse (System 8 Baghouse) – near the new finishing area
- Dryer Area Baghouse (System 3 Baghouse) – relocated outdoors, south of the blenders

Other Pneumatic System baghouses located at the facility include the OSB Dry Bin and Forming Baghouse (System 6 Baghouse), the OSB Sander and Trim Saw Baghouse, the Flying Cut-Off Saw Baghouse, and the Saw Line Baghouse. All facility baghouses vent outdoors.

Diesel Fire Pump

LP owns and operates a diesel-fired pump, referred to as the Diesel Fire Pump, used to provide water in emergency situations for the suppression of fire in the event electricity becomes unavailable at the facility. The Diesel Fire Pump has a design heat input capacity of 1.2 MMBtu/hr, a brake horsepower rating of approximately 185 hp (equivalent to 138 kW), and is fired with ultra-low sulfur diesel fuel (15 ppm or 0.0015% of sulfur or less by weight).

TOH Backup Pump

As part of the LSL project, LP installed a diesel-fired engine, referred to as the TOH Backup Pump. The TOH Backup Pump has a design heat input capacity of 0.3 MMBtu/hr and provides for continued circulation of the oil within the TOS in an emergency situation so that the TOS can be safely shutdown. This 57 hp unit replaced the 402 hp unit that was originally licensed as part of the LSL project in Air Emission License A-327-77-1-N but not installed. LP fires ultra-low sulfur

diesel fuel (15 ppm or 0.0015% of sulfur or less by weight) in the TOH Backup Pump.

E. General Facility Requirements

LP is subject to the following state and federal regulations listed below, in addition to the regulations listed for specific units as described further in this license.

| CITATION | REQUIREMENT TITLE |
|-------------------------------|--|
| 06-096 CMR 101 | Visible Emissions |
| 06-096 CMR 102 | Open Burning |
| 06-096 CMR 103 | Fuel Burning Equipment Particulate Emission Standard |
| 06-096 CMR 106 | Low Sulfur Fuel |
| 06-096 CMR 109 | Emergency Episode Regulation |
| 06-096 CMR 110 | Ambient Air Quality Standard |
| 06-096 CMR 116 | Prohibited Dispersion Techniques |
| 06-096 CMR 117 | Source Surveillance |
| 06-096 CMR 134 | Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds |
| 06-096 CMR 137 | Emission Statements |
| 06-096 CMR 138 | Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides |
| 06-096 CMR 140 | Part 70 Air Emission License Regulations |
| 06-096 CMR 143 | New Source Performance Standards (NSPS) |
| 06-096 CMR 144 | National Emission Standards for Hazardous Air Pollutants (NESHAP) |
| 40 CFR Part 60, Subpart Db | Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units |
| 40 CFR Part 60, Subpart IIII | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines |
| 40 CFR Part 63, Subpart DDDD | National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products |
| 40 CFR Part 63, Subpart ZZZZ | National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines |
| 40 CFR Part 63, Subpart DDDDD | National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters |
| 40 CFR Part 64 | Compliance Assurance Monitoring |
| 40 CFR Part 70 | State Operating Permit Programs |
| 40 CFR Part 75 | Continuous Emissions Monitoring |

Note: CMR = Code of Maine Regulations
CFR = Code of Federal Regulations

F. Units of Measurement

The following units of measurement are used in this license:

| | |
|----------|--|
| gr/dscf | grains per dry standard cubic feet |
| lb/hr | pounds per hour |
| lb/MMBtu | pounds per million British Thermal Units |
| lb/ton | pounds per ton |
| MMBtu/hr | million British Thermal Units per hour |
| ppmdv | parts per million on a dry volume basis |
| tpy | ton per year |

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

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 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. NO_x RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides, 06-096 CMR 138 (as amended) is applicable to sources that have the potential to emit quantities of NO_x equal to or greater than 100 tons/year. The CHU meets the NO_x RACT limit of 0.30 lb/MMBtu. LP operates a Continuous Emissions Monitoring System (CEMS) on the CHU in accordance with Chapter 138. The NO_x RACT requirements are incorporated in this renewal.

C. VOC RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 CMR 134 (as amended) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year from non-exempt equipment.

The Dryers are exempt from VOC RACT (Chapter 134) because they were subject to a Best Available Control Equipment (BACT) analysis in Air Emission License A-327-77-3-A.

The LSL Press is exempt from VOC RACT because it was subject to a BACT analysis in Air Emission License A-327-77-3-A.

The OSB Press and associated RCO/RTO is exempt from VOC RACT because it was subject to a BACT analysis in Air Emission License A-327-72-E-M.

The Edge Seal process is exempt from VOC RACT because it was subject to a BACT analysis in Air Emission License A-327-77-2-A.

The CHU, Diesel Fire Pump, and TOH Backup Pump are exempt from VOC RACT because their VOC emissions are due to incomplete combustion.

The remaining VOC emitting equipment have combined potential emissions less than 40 tpy. Therefore, LP is not subject to VOC RACT.

D. Mandatory Greenhouse Gas (GHG) Reporting

Federal regulation 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*, which contains GHG reporting and related monitoring and recordkeeping requirements, is applicable to the owners/operators of any facility which falls into any one of the following three categories, per 40 CFR Part 98, Subpart A, *General Provision*, § 98.2, *Who must report?*

- (a)(1) A facility that contains any source category that is listed in Table A-3 of this subpart in any calendar year starting in 2010.
- (a)(2) A facility that contains any source category that is listed in Table A-4 of this subpart and that emits 25,000 metric tons CO₂e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all applicable source categories that are listed in Table A-3 and Table A-4 of this subpart.
- (a)(3) A facility that in any calendar year starting in 2010 meets all three of the conditions listed in this paragraph (a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources only.

- (i) The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this section.
- (ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hour or greater.
- (iii) The facility emits 25,000 metric tons CO₂e or more per year in combined emissions from all stationary fuel combustion sources.

Emissions of CO₂ from the combustion of biomass are excluded from paragraph (a)(3)(iii) above. Therefore, LP does not meet all three conditions listed in paragraph (a)(3) above. Therefore, LP is not required to fulfill the recordkeeping and reporting requirements of 40 CFR Part 98.

E. PSD/BACT Review

The Department issued Air License A-327-77-1-N on 8/28/06 to LP. The license was issued to permit construction of the LSL production line and other equipment associated with this project. The license was issued pursuant to federal Prevention of Significant Deterioration (PSD) requirements and the Department's air licensing requirements for major modifications. LP subsequently modified the provisions of this license in amendments A-327-77-2-A (9/6/07), A-327-77-3-A (5/14/10), and A-327-77-4-A (4/24/13).

LP demonstrated in Air Emission License A-327-77-3-A that the net emissions increase levels for VOCs from the modified equipment and processes addressed in A-327-77-1-N are less than significant emissions increase levels. LP took additional license restrictions to ensure that net emissions increase levels continue to be less than significant emissions increase levels. Therefore, the modification was determined to be a minor modification for VOC emissions as opposed to a major modification as originally licensed.

F. Compliance Assurance Monitoring (CAM)

40 CFR Part 64, *Compliance Assurance Monitoring*, is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100 tons/year for any pollutant. Emission units are exempt from CAM if the emission limitations are imposed by either New Source Performance Standards or National Emission Standards for Hazardous Air Pollutants proposed after November 15, 1990.

CAM does not apply to PM emission from the TOH stack (Stack #1) because the CHU is subject to a PM emission limit under 40 CFR Part 60, Subpart Db as well as under 40 CFR Part 63, Subpart DDDDD.

CAM does not apply to VOC emissions from the OSB Press, LSL Press, and Dryers because these units are subject to emission limits/standards under 40 CFR Part 63, Subpart DDDD.

CAM does apply to PM emissions from the Dryers, Dry Wafer Storage Bins, and Flying Cutoff Saws.

The CAM requirements are incorporated in this renewal.

G. Stack Testing for Particulate Matter

The previous license had a requirement to stack test the CHU-TOS stack (Stack #1), Dryer stack (Stack #2) and OSB Press RCO/RTO (Stack #3) for particulate matter once every two years. Since the issuance of the initial Part 70 air emission license, the statutory requirement of 38 M.R.S.A. §589, Sub-section 2 has been revised as follows: “A person is not required to conduct stack tests for particulate matter on a source monitored by a continuous monitoring device for opacity as specified by 40 Code of Federal Regulations, Part 60, Appendix B, specification 1 or appropriate surrogate parameters as required by the commissioner more frequently than once every 5 years unless visible emissions, operating parameters or other information indicates the source may be operating out of compliance with any applicable emission standard or unless there are more stringent federal requirements. If visible emissions, operating parameters or other information indicates potential noncompliance with an air emission standard or if there are more stringent federal requirements, the Department may require additional stack tests.” The revised timeframe for PM stack testing is incorporated into this renewal for the CHU-TOS stack since this unit is required to monitor for opacity. The CHU – Dryer stack and OSB Press RCO/RTO will continue to be required to stack test for PM once every other year.

H. Central Heating Unit (CHU) and Thermal Oil System (TOS)

The CHU is a wood-fired unit with a design heat input capacity of 278 MMBtu/hr. As described above, the exhaust stream from the CHU is split into two distinct streams based upon heat demand load, the “CHU – Dryers” exhaust stream and “CHU – TOS” exhaust stream.

The CHU – Dryers exhaust stream provides direct-contact heat to the Rotary Dryers (typically representing between 30% and 40% of the heat generated by the CHU). The CHU – Dryers exhaust stream passes through the Rotary Dryers and is sent through each dryer’s centrifugal cyclone and a single wet electrostatic precipitator (WESP) for control of PM emissions before being routed through a regenerative thermal oxidizer, referred to as the Dryer RTO, for control of CO,

VOC, and HAP emissions. Emissions exhaust through Stack #2. Emissions from Stack #2 are discussed in more detail in the Dryers section of these Findings.

The CHU – TOS exhaust stream provides indirect-contact heat to the TOS (typically representing between 60% and 70% of the heat generated by the CHU). The TOS provides heat for the OSB press, buildings, log ponds, and a steam generator. The steam generator produces steam for use in the LSL Press. The CHU – TOS exhaust stream is sent to a multiple centrifugal cyclone followed by a dry electrostatic precipitator (ESP) for control of PM emissions and discharged to the ambient air through Stack #1.

1. New Source Performance Standards (NSPS)

The CHU – TOS stack is subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Db. These standards apply to steam generating units with a heat input capacity of 100 MMBtu/hr or more that are constructed after June 19, 1984.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The CHU – TOS is subject to *NESHAP for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters* contained in 40 CFR Part 63, Subpart DDDDD. The CHU – TOS is considered an existing unit classified as a “stoker/sloped grate/others designed to burn wet biomass fuel.”

3. Control Equipment

PM emissions from the CHU – TOS stack are controlled by a multiple centrifugal cyclone separator (multiclone) followed by an electrostatic precipitator (ESP). LP shall operate, at a minimum, the number of ESP fields in operation during the most recent stack test demonstrating compliance with licensed PM emission limits. Upon written notification to the Department, and in accordance with the *Bureau of Air Quality's Air Emission Compliance Test Protocol*, LP may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall LP be relieved of its obligation to meet its licensed emission limits.

4. Emission Limits and Streamlining

For the CHU – TOS, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|-------------------|--|---|---|
| PM | 0.030 lb/MMBtu | 40 CFR Part 60, Subpart Db, §60.43b(h)(1) | 0.030 lb/MMBtu * |
| | 0.037 lb/MMBtu | 40 CFR Part 63, Subpart DDDDD, Table 2(7) | |
| | 4.6 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 4.6 lb/hr |
| PM ₁₀ | 0.030 lb/MMBtu | 06-096 CMR 115, BACT (A-327-77-1-N) | 0.030 lb/MMBtu |
| | 4.6 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 4.6 lb/hr |
| SO ₂ | 3.8 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 3.8 lb/hr |
| NO _x | 200 ppm _v (see Note 1) | 06-096 CMR 115, BACT (A-327-77-1-N) | 200 ppm _v (see Note 1) |
| | 0.30 lb/MMBtu (see Note 2) | 06-096 CMR 138, §3(B)(3) | 0.23 lb/MMBtu * (see Note 2) |
| | 0.23 lb/MMBtu | 06-096 CMR 115, BACT (A-327-77-1-N) | |
| | 35.2 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 35.2 lb/hr |
| CO | 400 ppm _v (see Notes 3 & 4) | 06-096 CMR 115, BACT (A-327-77-1-N) | 400 ppm _v (see Note 3) |
| | 35.2 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 35.2 lb/hr |
| VOC | 0.60 lb/hr (as carbon) | 06-096 CMR 115, BACT (A-327-77-4-A) | 0.60 lb/hr (as carbon) |
| Visible Emissions | 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period. | 06-096 CMR 101, §2(B)(1)(e) | 20% opacity on a 6-minute block average basis, except for one 6-minute period per hour of not more than 27% opacity * |
| | 20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity | 40 CFR Part 60, Subpart Db, §60.42b(f) | |

* streamlining requested

Note 1: Corrected to 7% O₂ based on an F factor of 9,600 dscf/MMBtu and a 30-day rolling average.

Note 2: Based on a one hour average.

Note 3: Corrected to 7% O₂ on a 30-day rolling average.

Note 4: This limit applies at all times except periods of startup, shutdown, and malfunction or if the unit is operating at less than 50% rated capacity.

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with the CHU – TOS stack shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

| Pollutant | Applicable Emission Limit | Compliance Method | Frequency |
|-------------------|--|---|--|
| PM | 0.030 lb/MMBtu | 40 CFR Part 60, App. A, Method 5 | Once every five years (by 12/31/18) |
| | 4.6 lb/hr | | |
| PM ₁₀ | 0.030 lb/MMBtu | 40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A | As requested |
| | 4.6 lb/hr | | |
| SO ₂ | 3.8 lb/hr | 40 CFR Part 60, App. A, Method 6C | As requested |
| NO _x | 200 ppm _{dv} | NO _x CEMS | Continuous (in accordance with 40 CFR Part 60, App. B) |
| | 0.23 lb/MMBtu | | |
| | 35.2 lb/hr | 40 CFR Part 60, App. A, Method 7E | As requested |
| CO | 400 ppm _{dv} | CO CEMS | Continuous (in accordance with 40 CFR Part 60, App. B) |
| | 35.2 lb/hr | 40 CFR Part 60, App. A, Method 10 | As requested |
| VOC | 0.60 lb/hr | 40 CFR Part 60, App. A, Method 25 or 25A | As requested |
| Visible Emissions | 20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity. | COMS on a 6-minute block average basis | Continuous (in accordance with 40 CFR Part 60, App. B) |

6. Compliance Assurance Monitoring (CAM)

CAM does not apply to PM emissions from the CHU – TOS stack (Stack #1) because the CHU is subject to a PM emission limit under 40 CFR Part 60, Subpart Db as well as under 40 CFR Part 63, Subpart DDDDD.

7. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the CHU and the air pollution control equipment associated with the CHU – TOS stack as indicated in the following tables whenever the equipment is operating.

| CHU | | | |
|--------------------|-------------------------|-------------------------------|---|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Wood fuel use | Tons | Conveyor belt scales | Daily, monthly, and 12-month rolling total |
| Emergency Vent Use | Hours | Logs (written or electronic) | Maintain records of all emergency vent times. |

| ESP on CHU – TOS | | | |
|-------------------------|-------------------------|-------------------------------|---|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Primary Voltage | Volts or kilovolts | Volt meter | Monitor: Continuously Record: Once per shift |
| Secondary Voltage | Volts or kilovolts | Volt meter | Monitor: Continuously Record: Once per shift |
| Primary Current | Amps | Amp meter | Monitor: Continuously Record: Once per shift |
| Secondary Current | Amps | Amp meter | Monitor: Continuously Record: Once per shift |
| Spark rate | sparks/min | ESP control system | Monitor: Continuously Record: Once per shift |

8. CEMS and COMS

For the CHU – TOS stack the table below lists the required continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS).

| Pollutant and Continuous Monitor | Unit of Measurement | Origin and Authority |
|---|----------------------------|-----------------------------------|
| NO _x CEMS | ppmdv & lb/MMBtu | 06-096 CMR 117 and 06-096 CMR 138 |
| CO CEMS | ppmdv | 06-096 CMR 117 |
| Opacity COMS | % | 06-096 CMR 117 |

I. **Dryers**

The CHU – Dryers exhaust stream provides direct-contact heat to the Rotary Dryers (typically representing between 30% and 40% of the heat generated by the CHU). The CHU – Dryers exhaust stream passes through the Rotary Dryers and is sent through each dryer’s centrifugal cyclone and a single wet electrostatic precipitator (WESP) for control of PM emissions before being routed through a regenerative thermal oxidizer, referred to as the Dryer RTO, for control of CO, VOC, and HAP emissions. Emissions exhaust through Stack #2.

1. Federal Consent Decree

Previous Part 70 licenses referenced a Federal Consent Decree (CV93-0869-L-O) in regards to emission limits and monitoring requirements for the Dryer RTO. This consent decree terminated in November of 2001 and is no longer in effect.

2. New Source Performance Standards (NSPS)

The CHU – Dryer stack is not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Db. These standards apply to steam generating units with a heat input capacity of 100 MMBtu/hr or more that are constructed after June 19, 1984.

The term “steam generating unit,” as defined in Subpart Db, does not include process heaters. The USEPA has concluded that direct contact heat operations are not subject to the requirements of NSPS Subpart Db.

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

LP is subject to *NESHAP for Plywood and Composite Wood Products* contained in 40 CFR Part 63, Subpart DDDD. The Dryers are considered part of the affected source per §63.2232(b). The initial compliance test for this equipment was performed in February 2009.

The CHU – Dryer stack is not subject to the *NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* contained in 40 CFR Part 63, Subpart DDDDD. The term “process heater,” as defined in Subpart DDDDD, excludes devices in which the combustion gases come into direct contact with process materials.

4. Control Equipment

PM emissions from CHU – Dryer stack are controlled by a wet electrostatic precipitator (WESP). LP shall operate, at a minimum, the number of ESP fields in operation during the most recent stack test demonstrating compliance with licensed PM emission limits. Upon written notification to the Department, and in accordance with the *Bureau of Air Quality's Air Emission Compliance Test Protocol*, LP may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall LP be relieved of its obligation to meet its licensed emission limits.

VOC emissions from the CHU – Dryer stack are controlled by a Regenerative Thermal Oxidizer (RTO). The exhaust gas enters through a bed of heated packed ceramic saddles, which preheat the flue gas. Once through the saddles, the gas enters the direct flame chamber. Here pollutants are incinerated and converted to carbon dioxide and water. The gases then pass through another layer of packed ceramic saddles where the heat in the gases is transferred back to the saddles. The gases then pass through a valve and are drawn through a fan and discharged up the stack.

During RTO operation, condensed particles accumulate on the ceramic media and increase pressure drop. As a result, the RTO must be taken through a bake-out process to clean the ceramics. During the bake-out process, the unit is taken off line and the temperature of the ceramic is heated until excess material coating the ceramic is burned off.

LP has a bypass system for emergency situations. In an emergency shutdown, gases bypass the RTO unit and are vented to the atmosphere directly from the WESP via Stack #4.

5. Emission Limits and Streamlining

For the CHU – Dryer stack, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|-------------------|---|-------------------------------------|---|
| PM | 0.015 gr/dscf | 06-096 CMR 115, BACT (A-327-77-1-N) | 0.015 gr/dscf |
| | 15.6 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 15.6 lb/hr |
| PM ₁₀ | 15.6 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 15.6 lb/hr |
| SO ₂ | 0.43 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 0.43 lb/hr |
| NO _x | 32.9 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 32.9 lb/hr |
| CO | 109.0 lb/hr | 06-096 CMR 115, BACT (A-327-77-1-N) | 109.0 lb/hr |
| VOC | 2.25 lb/hr (as carbon) | 06-096 CMR 115, BACT (A-327-77-3-A) | 2.25 lb/hr (as carbon) |
| Visible Emissions | 30% on a six (6) minute block average, except for no more than three (3) six (6) minute block averages in a 3-hour block period. | 06-096 CMR 101, §2(B)(5)(a) | 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period. For RTO start-ups during the bake-out process, 30% for 2 hours except for 30 minutes which cannot exceed 70%. * |
| | 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period. For RCO/RTO start-ups during the bake-out process, 30% for 2 hours except for 30 minutes which cannot exceed 70%. | 06-096 CMR 140, BPT (A-327-70-A-I) | |

* streamlining requested

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with the CHU – Dryer stack shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

| Pollutant | Applicable Emission Limit | Compliance Method | Frequency |
|-------------------|--|---|-------------------------------------|
| PM | 0.015 gr/dscf 15.6 lb/hr | 40 CFR Part 60, App. A, Method 5 | Once every two years (by 12/31/15) |
| PM ₁₀ | 15.6 lb/hr | 40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A | As requested |
| SO ₂ | 0.43 lb/hr | 40 CFR Part 60, App. A, Method 6C | As requested |
| NO _x | 32.9 lb/hr | 40 CFR Part 60, App. A, Method 7E | Once every five years (by 12/31/18) |
| CO | 109.0 lb/hr | 40 CFR Part 60, App. A, Method 10 | As requested |
| VOC | 2.25 lb/hr | 40 CFR Part 60, App. A, Method 25 or 25A | As requested |
| Visible Emissions | 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block average in a 3 hour period. For RCO/RTO start-ups during the bake-out process, 30% for 2 hours except for 30 minutes which cannot exceed 70%. | Method 9 Observations | As requested and during bake-outs |

7. Compliance Assurance Monitoring (CAM)

CAM does not apply to VOC emission from the Dryers because they are subject to VOC emission standards under 40 CFR Part 63, Subpart DDDD.

CAM does apply to PM emissions from the Dryers. The CAM monitoring requirements are included in the monitoring section below.

8. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the air pollution control equipment associated with the CHU – Dryer stack as indicated in the following tables whenever the equipment is operating.

| WESP | | | | |
|-----------------------|-------------------|-----------------------------|-----------------------------------|---|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Y | Secondary Voltage | Volts or kilovolts | Volt meter | Monitor: Continuously Record: Once per shift |
| Y | Secondary Current | Amps | Amp meter | Monitor: Continuously Record: Once per shift |

| Dryer RTO | | | | |
|-----------------------|--------------------------------|---------------------------------|---|---|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| N | Combustion Chamber Temperature | °F | Thermocouple | Monitor: Continuously Record: 3-hr Average |
| N | Outlet Air Flow | cfm | Flow Monitor | Monitor: Continuously Record: 3-hr Average |
| Y | Bake-out Visible Emissions | % Opacity | Method 9 Observations | Midway through each bake-out cycle. (See Note 1) |
| N | Operating Time | Hours | RTO Control System | Daily, monthly, and calendar year |
| N | Fuel Use | scf (nat gas) gal. (propane) | Fuel meter logs or fuel flow recording charts | Monthly & 12-month rolling total |
| N | Bypass Time | Hours | Logs (written or electronic) | Maintain records of all RTO bypass times. |

Note 1: Visible emissions readings shall be taken every 15 seconds for at least 18 minutes.

9. CEMS and COMS

There are no CEMS or COMS required for the CHU – Dryer stack.

J. Fire Pump

LP operates a Fire Pump manufactured in 1981 and installed in 1982. The Fire Pump is rated at 1.2 MMBtu/hr and fires diesel fuel with a sulfur content not to exceed 0.0015% by weight. The Fire Pump is limited to 500 hours/yr operation.

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* is applicable to the Fire Pump. The Fire Pump is considered an existing, emergency stationary reciprocating internal combustion engine at a major HAP source and is not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt this unit from the federal requirements.

a. Emergency Definition:

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the following criteria:

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
- (2) Paragraph (1) above notwithstanding, the emergency stationary RICE may be operated for any combination of the purposes specified below for a maximum of 100 hours per calendar year:
 - (i) Maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require

maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- (3) Paragraphs (1) and (2) above notwithstanding, emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. These 50 hours are counted as part of the 100 hours per calendar year for maintenance checks and readiness testing, emergency demand response, and periods of voltage deviation or low frequency, as provided in paragraph (2) above.

The Fire Pump shall be limited to the usage outlined in §63.6640(f) and therefore may be classified as an existing emergency stationary RICE as defined in 40 CFR Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in §63.6640(f) may cause this engine to not be considered an emergency engine and therefore subject to all the requirements for non-emergency engines.

b. 40 CFR Part 63, Subpart ZZZZ Requirements:

| | Compliance Dates | Operating Limitations* (40 CFR §63.6603(a) and Table 2(d)) |
|--------------------------------------|---------------------------|---|
| Compression ignition (diesel) units: | No later than May 3, 2013 | <ul style="list-style-type: none">- Change oil and filter every 500 hours of operation or annually, whichever comes first;- Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. |

* Note: Due to the 500 hour operation limit on each generator, the inspections and oil/filter changes shall be performed annually to meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

The Fire Pump shall be operated and maintained according to the manufacturer's emission-related written instructions or LP shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR §63.6625(e)]

LP has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, LP must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]

A non-resettable hour meter shall be installed and operated on the Fire Pump. [40 CFR §63.6625(f)]

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]

The Fire Pump shall be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). [40 CFR §63.6640(f)]

LP shall keep records that include maintenance conducted on the Fire Pump and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. [40 CFR §63.6655(e) and (f)]

2. Emission Limits and Streamlining

For the Fire Pump a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|-------------------|---|---|---|
| PM | 0.14 lb/hr | 06-096 CMR 140, BPT | 0.14 lb/hr |
| PM ₁₀ | 0.14 lb/hr | 06-096 CMR 140, BPT | 0.14 lb/hr |
| SO ₂ | Max fuel sulfur content of 0.0015% by weight | 06-096 CMR 140, BPT | Max fuel sulfur content of 0.0015% by weight |
| NO _x | 5.29 lb/hr | 06-096 CMR 140, BPT and AP-42 Table 3.3-1 dated 10/96 (4.41 lb/MMBtu) | 5.29 lb/hr |
| CO | 1.14 lb/hr | 06-096 CMR 140, BPT and AP-42 Table 3.3-1 dated 10/96 (0.95 lb/MMBtu) | 1.14 lb/hr |
| VOC | 0.42 lb/hr | 06-096 CMR 140, BPT and AP-42 Table 3.3-1 dated 10/96 (0.35 lb/MMBtu) | 0.42 lb/hr |
| Visible Emissions | No greater than 20% opacity on a six (6) min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period. | 06-096 CMR 101 | No greater than 20% opacity on a six (6) min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period. |

3. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Fire Pump shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

4. Compliance Assurance Monitoring

CAM is not applicable to the Fire Pump.

5. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the Fire Pump as indicated in the following table.

| Fire Pump | | | |
|-------------------------|--------------------|-----------------------------|------------------------------------|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| fuel oil sulfur content | Percent, by weight | Fuel receipts from supplier | As fuel is purchased |
| Operating time | Hours | Hour Meter | Monthly and 12-month rolling total |

6. CEMS and COMS

There are no CEMS or COMS required for the Fire Pump.

K. TOH Backup Pump

LP operates a TOH Backup Pump manufactured and installed in 2007. The TOH Backup Pump is rated at 0.3 MMBtu/hr and fires diesel fuel with a sulfur content not to exceed 0.0015% by weight. The TOH Backup Pump is limited to 500 hours/yr operation.

1. New Source Performance Standards (NSPS)

The federal regulation 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) is applicable to the TOH Backup Pump since the unit was ordered after July 11, 2005 and manufactured after April 1, 2006. By meeting the requirements of Subpart IIII, the TOH Backup Pump also meets the requirements found in the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ.

a. Emergency Definition:

Emergency stationary ICE means any stationary reciprocating internal combustion engine that meets all of the following criteria:

- (1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when

electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) Paragraph (1) above notwithstanding, the emergency stationary ICE may be operated for any combination of the purposes specified below for a maximum of 100 hours per calendar year:

(i) Maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(3) Paragraphs (1) and (2) above notwithstanding, emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. These 50 hours are counted as part of the 100 hours per calendar year for maintenance checks and readiness testing. [40 CFR §60.4211(f) and §60.4219]

b. 40 CFR Part 60, Subpart IIII Requirements:

The TOH Backup Pump shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 CFR §60.4202. [40 CFR §60.4205(b)]

The diesel fuel fired in the TOH Backup Pump shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR §60.4207(b)]

A non-resettable hour meter shall be installed and operated on the TOH Backup Pump. [40 CFR §60.4209(a)]

The TOH Backup Pump shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by LP that are approved by the engine manufacturer. LP may

only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]

The TOH Backup Pump shall be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §60.4211(f)(3)(i) are met).
[40 CFR §60.4211(f)]

No initial notification is required for emergency engines.
[40 CFR §60.4214(b)]

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* is applicable to the TOH Backup Pump. The unit is considered an existing, emergency stationary reciprocating internal combustion engines at a major HAP source. However, the TOH Backup Pump is also subject to New Source Performance Standards. By meeting the requirements of 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)*, the unit also meets the requirements found in 40 CFR Part 63, Subpart ZZZZ.

3. Emission Limits and Streamlining

For the TOH Backup Pump a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|-------------------|---|---|---|
| PM | 0.04 lb/hr | 06-096 CMR 140, BPT | 0.04 lb/hr |
| PM ₁₀ | 0.04 lb/hr | 06-096 CMR 140, BPT | 0.04 lb/hr |
| SO ₂ | Max fuel sulfur content of 0.0015% by weight | 40 CFR §60.4207(b) | Max fuel sulfur content of 0.0015% by weight |
| NO _x | 1.32 lb/hr | 06-096 CMR 140, BPT and AP-42 Table 3.3-1 dated 10/96 (4.41 lb/MMBtu) | 1.32 lb/hr |
| CO | 0.29 lb/hr | 06-096 CMR 140, BPT and AP-42 Table 3.3-1 dated 10/96 (0.95 lb/MMBtu) | 0.29 lb/hr |
| VOC | 0.11 lb/hr | 06-096 CMR 140, BPT and AP-42 Table 3.3-1 dated 10/96 (0.35 lb/MMBtu) | 0.11 lb/hr |
| Visible Emissions | No greater than 20% opacity on a six (6) min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period. | 06-096 CMR 101 | No greater than 20% opacity on a six (6) min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period. |

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the TOH Backup Pump shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

5. Compliance Assurance Monitoring

CAM is not applicable to the TOH Backup Pump.

6. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the TOH Backup Pump as indicated in the following table.

| TOH Backup Pump | | | |
|-------------------------|--------------------|-----------------------------|------------------------------------|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| fuel oil sulfur content | Percent, by weight | Fuel receipts from supplier | As fuel is purchased |
| Operating time | Hours | Hour Meter | Monthly and 12-month rolling total |

7. CEMS and COMS

There are no CEMS or COMS required for the TOH Backup Pump.

L. Dry Wafer Storage Bins

The screened dried wafers are conveyed to either one of two dry wafer storage bins. Emissions from the dry wafer storage bins include PM and VOC.

Emissions of VOC from the dry wafer storage bins are calculated using the following formula:

$$\text{Tons of VOC/year} = \text{hours of operation per year} \times 0.713 \text{ lb/hr} \div 2000 \text{ lb/ton}$$

1. Control Equipment

LP utilizes a baghouse to control PM emissions from the dry wafer storage bins. This baghouse vents outside the building.

2. Emission Limits and Streamlining

For the dry wafer storage bins, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|-------------------|---|-------------------------------------|---|
| PM | 0.12 lb/hr | 06-096 CMR 115, BACT (A-327-70-H-A) | 0.12 lb/hr |
| VOC | 3.1 tpy | 06-096 CMR 115, BACT (A-327-70-H-A) | 3.1 tpy |
| Visible Emissions | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. | 06-096 CMR 101, §2(B)(3)(c) | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. |

3. Emission Limit Compliance Methods

Compliance with the emission limits associated with the dry wafer storage bins shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

| Pollutant | Applicable Emission Limit | Compliance Method | Frequency |
|-------------------|---|----------------------------------|----------------------------------|
| PM | 0.12 lb/hr | 40 CFR Part 60, App. A, Method 5 | As requested |
| VOC | 3.1 tpy | Per calculation listed above | Monthly & 12-month rolling total |
| Visible Emissions | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. | Method 9 Observations | As requested |

4. Compliance Assurance Monitoring (CAM)

CAM applies to PM emissions from the dry wafer storage bins. The CAM monitoring requirements are included in the monitoring section below.

5. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the dry wafer storage bins and associated air pollution control equipment as indicated in the following tables whenever the equipment is operating.

| Dry Wafer Storage Bins | | | | |
|------------------------|-----------------|------------------|---------------------------|--|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| N | Operating times | Hours | Control System or Logbook | Daily, Monthly, & 12-month rolling total |

| Dry Wafer Storage Bins Baghouse | | | | |
|---------------------------------|------------------------------|------------------|--|--|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Y | Pressure Drop | inches of water | Differential pressure across the filter bags | Monitor: Continuously Record: Once per shift |
| Y | Maintenance activity records | Each | Record in logbook | Maintain records documenting maintenance activities performed on the baghouse. |

6. CEMS and COMS

There are no CEMS or COMS required for the dry wafer storage bins.

M. Flying Cut-off Saws

Flying cutoff saws are used to cut the mats to proper size before they enter either the OSB or LSL presses. Emissions from the flying cut-off saws include PM and VOC.

Emissions of VOC from the flying cut-off saws are calculated using the following formula:

$$\text{Tons of VOC/year} = \text{hours of operation per year} \times 1.95 \text{ lb/hr} \div 2000 \text{ lb/ton}$$

1. Control Equipment

LP utilizes a baghouse to control PM emissions from the flying cut-off saws. This baghouse vents outside the building.

2. Emission Limits and Streamlining

For the flying cut-off saws, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|-------------------|---|-------------------------------------|---|
| PM | 0.58 lb/hr | 06-096 CMR 115, BACT (A-327-70-H-A) | 0.58 lb/hr |
| VOC | 8.6 tpy | 06-096 CMR 115, BACT (A-327-70-H-A) | 8.6 tpy |
| Visible Emissions | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. | 06-096 CMR 101, §2(B)(3)(c) | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. |

3. Emission Limit Compliance Methods

Compliance with the emission limits associated with the flying cut-off saws shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

| Pollutant | Applicable Emission Limit | Compliance Method | Frequency |
|-------------------|---|----------------------------------|----------------------------------|
| PM | 0.58 lb/hr | 40 CFR Part 60, App. A, Method 5 | As requested |
| VOC | 8.6 tpy | Per calculation listed above | Monthly & 12-month rolling total |
| Visible Emissions | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. | Method 9 Observations | As requested |

4. Compliance Assurance Monitoring (CAM)

CAM applies to PM emissions from the flying cut-off saws. The CAM monitoring requirements are included in the monitoring section below.

5. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the air pollution control equipment associated with the flying cut-off saws as indicated in the following tables whenever the equipment is operating.

| Flying Cut-off Saws | | | | |
|---------------------|-----------------|------------------|---------------------------|--|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| N | Operating times | Hours | Control System or Logbook | Daily, Monthly, & 12-month rolling total |

| Flying Cut-off Saws Baghouse | | | | |
|------------------------------|------------------------------|------------------|--|--|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Y | Pressure Drop | inches of water | Differential pressure across the filter bags | Monitor: Continuously Record: Once per shift |
| Y | Maintenance activity records | Each | Record in logbook | Maintain records documenting maintenance activities performed on the baghouse. |

6. CEMS and COMS

There are no CEMS or COMS required for the flying cut-off saws.

N. OSB Press

Formed wafer mats are separated into nominal 16' lengths and then deposited into the OSB press by the press loader, which accumulates 12 mats prior to cycling the press. The OSB press system includes the necessary hydraulic equipment, heating oil circulation system, and controls to manufacture the products desired. The OSB press utilizes the heated oil from the CHU – TOH system to deliver an effective board pressure of up to approximately 750 psig. After the pressing cycle is complete, the pressed boards are sent to the finishing area.

LP treats the exhaust from the OSB Press in the Press RCO/RTO before it is exhausted through Stack #3.

1. Federal Consent Decree

Previous Part 70 licenses referenced a Federal Consent Decree (CV93-0869-L-O) in regards to emission limits and monitoring requirements for the Press RCO/RTO. This consent decree terminated in November of 2001 and is no longer in effect.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

LP is subject to *NESHAP for Plywood and Composite Wood Products* contained in 40 CFR Part 63, Subpart DDDD. The OSB Press is considered part of the affected source per §63.2232(b).

LP temporarily shut down the OSB line due to market conditions in 2007, prior to the compliance date for Subpart DDDD. The OSB line was restarted in 2013 and an initial compliance test is scheduled to be performed in 2014.

3. Control Equipment

VOC emissions from the OSB Press are controlled by equipment that may act as either a Regenerative Catalytic Oxidizer (RCO) or a Regenerative Thermal Oxidizer (RTO). The exhaust gas enters through a bed of heated packed ceramic saddles, which preheat the flue gas. Once through the saddles, the gas enters the direct flame chamber. Here, pollutants are incinerated and converted to carbon dioxide and water. The gases then pass through another layer of packed ceramic saddles where the heat in the gases is transferred back to the saddles. The gases then pass through a valve and are drawn through a fan and discharged up the stack.

LP is licensed to fire either propane or natural gas in the RCO/RTO. When operating as an RTO, the maximum heat input capacity of the two burners combined is 11.2 MMBtu/hr. When used as an RCO, the firing rate of the burners is reduced by inserting an orifice in the gas inlet line to physically limit the firing rate to 7.0 MMBtu/hr for both burners combined.

During RCO/RTO operation, condensed particles accumulate on the ceramic media and increase pressure drop. As a result, the RCO/RTO must be taken through a bake-out process to clean the ceramics. During the bake-out process, the unit is taken off line and the temperature of the ceramic is heated until excess material coating the ceramic is burned off.

4. Emission Limits and Streamlining

For the OSB Press, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| When the oxidation system is operating as an RCO | | | |
|---|---|------------------------------------|---|
| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
| PM | 0.015 gr/dscf | 06-096 CMR 140, BPT (A-327-70-F-A) | 0.015 gr/dscf |
| | 12.3 lb/hr | 06-096 CMR 140, BPT (A-327-70-F-A) | 12.3 lb/hr |
| PM ₁₀ | 12.3 lb/hr | 06-096 CMR 140, BPT (A-327-70-F-A) | 12.3 lb/hr |
| SO ₂ | 1.5 lb/hr | 06-096 CMR 140, BPT (A-327-70-H-A) | 1.5 lb/hr |
| NO _x | 19.9 lb/hr | 06-096 CMR 140, BPT (A-327-70-F-A) | 19.9 lb/hr |
| CO | 9.5 lb/hr | 06-096 CMR 140, BPT (A-327-70-H-A) | 9.5 lb/hr |
| VOC | 1.75 lb/hr (as carbon) | 06-096 CMR 140, BPT (A-327-70-F-A) | 1.75 lb/hr (as carbon) |
| Visible Emissions | 30% recorded as six (6) minute block averages, except for no more than three (3) six (6) minute block averages in a 3-hour block period | 06-096 CMR 101, §2(B)(5)(a) | 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period. For RCO/RTO start-ups during the bake-out process, 30% for 2 hours except for 30 minutes which cannot exceed 70%. * |
| | 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period. For RCO/RTO start-ups during the bake-out process, 30% for 2 hours except for 30 minutes which cannot exceed 70%. | 06-096 CMR 140, BPT (A-327-70-F-A) | |

* streamlining requested

| When the oxidation system is operating as an RTO | | | |
|--|---|--------------------------------------|---|
| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
| PM | 0.015 gr/dscf | 06-096 CMR 140, BPT (A-327-72-E-M) | 0.015 gr/dscf |
| | 12.3 lb/hr | 06-096 CMR 140, BPT (A-327-72-E-M) | 12.3 lb/hr |
| PM ₁₀ | 12.3 lb/hr | 06-096 CMR 140, BPT (A-327-72-D-A/R) | 12.3 lb/hr |
| SO ₂ | 1.5 lb/hr | 06-096 CMR 140, BPT (A-327-70-H-A) | 1.5 lb/hr |
| NO _x | 20.5 lb/hr | 06-096 CMR 140, BPT (A-327-72-D-A/R) | 20.5 lb/hr |
| CO | 9.6 lb/hr | 06-096 CMR 140, BPT (A-327-70-H-A) | 9.6 lb/hr |
| VOC | 1.75 lb/hr (as carbon) | 06-096 CMR 140, BPT (A-327-72-E-M) | 1.75 lb/hr (as carbon) |
| Visible Emissions | 30% recorded as six (6) minute block averages, except for no more than three (3) six (6) minute block averages in a 3-hour block period | 06-096 CMR 101, §2(B)(5)(a) | 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period. For RCO/RTO start-ups during the bake-out process, 30% for 2 hours except for 30 minutes which cannot exceed 70%. * |
| | 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period. For RCO/RTO start-ups during the bake-out process, 30% for 2 hours except for 30 minutes which cannot exceed 70%. | 06-096 CMR 140, BPT (A-327-70-A-I) | |

* streamlining requested

5. Emission Limit Compliance Methods

The Press RCO/RTO is primarily operated as an RCO. Therefore, compliance with the emission limits associated with the OSB Press and associated RCO shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department. Compliance with emission limits associated with the

operation of the Press RCO/RTO as an RTO shall be performed as requested by the department using similar methods as for operation as an RCO.

| Pollutant | Applicable Emission Limit | Compliance Method | Frequency |
|-------------------|---|---|-------------------------------------|
| PM | 0.015 gr/dscf | 40 CFR Part 60, App. A, Method 5 | Once every two years (by 12/31/15) |
| | 12.3 lb/hr | | |
| PM ₁₀ | 12.3 lb/hr | 40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A | As requested |
| SO ₂ | 1.5 lb/hr | 40 CFR Part 60, App. A, Method 6C | As requested |
| NO _x | 19.9 lb/hr | 40 CFR Part 60, App. A, Method 7E | Once every five years (by 12/31/18) |
| CO | 9.5 lb/hr | 40 CFR Part 60, App. A, Method 10 | As requested |
| VOC | 1.75 lb/hr | 40 CFR Part 60, App. A, Method 25 or 25A | Every other year (by 12/31/15) |
| Visible Emissions | 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period. For RCO/RTO start-ups during the bake-out process, 30% for 2 hours except for 30 minutes which cannot exceed 70%. | Method 9 Observations | As requested and during bake-outs |

6. Compliance Assurance Monitoring (CAM)

CAM does not apply to VOC emission from the OSB Press because it is subject to VOC emission standards under 40 CFR Part 63, Subpart DDDD.

7. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the air pollution control equipment associated with the OSB Press as indicated in the following tables whenever the equipment is operating.

| OSB Press | | | |
|------------------|---|-------------------------------|-------------------------------|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Production Rate | Tons of finished product per day on a 7-day rolling avg | Production Records | Daily & 7-day rolling average |

| Press RCO/RTO | | | |
|--------------------------------|---------------------------------|---|---|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Combustion Chamber Temperature | °F | Thermocouple | Monitor: Continuously Record: 3-hr Average |
| Outlet Air Flow | cfm | Flow Monitor | Monitor: Continuously Record: 3-hr Average |
| Bake-out Times | Hours | RCO/RTO Control System | Each occurrence |
| Bake-out Visible Emissions | % Opacity | Method 9 Observations | Midway through each bake-out cycle. (See Note 1) |
| Operating Time | Hours | RCO/RTO Control System | Daily, monthly, and calendar year |
| Maintenance & Malfunctions | Each | Records of dates and durations | Each occurrence |
| Fuel Use | scf (nat gas) gal. (propane) | Fuel meter logs or fuel flow recording charts | Monthly & 12-month rolling total |

Note 1: Visible emissions readings shall be taken every 15 seconds for at least 18 minutes.

8. CEMS and COMS

There are no CEMS or COMS required for the OSB Press.

O. LSL Press

Acceptable mats from the LSL forming line are sent to the LSL Press. The LSL Press is a steam injection, single-opening type press which makes LSL products with a nominal design thickness of up to 3½ inches. The acceptable mats are transferred to press platens and taken into the press, where steam is injected into the furnish, both curing the board and heating the press. The press activates the applied resin and bonds the product into a single solid entity. After the pressing cycle is complete, the pressed boards, referred to as billets, are sent to the finishing area.

LP has the physical capability to treat the exhaust from the LSL Press in the existing Press RCO/RTO. (This is the same control device used to treat the exhaust from the OSB Press when it is being operated.) However, LP has demonstrated, to the Department's satisfaction that the RCO/RTO is not a cost effective treatment option. Therefore, LP is not required to operate the RCO/RTO for control of emissions from the LSL Press.

Steam utilized by the LSL Press is supplied by a steam generator heated by the thermal oil system (TOS), which receives indirect heat from the CHU. The platens on the press are heated indirectly by the TOS, as well. Also, a release agent is sprayed on the bottom face conveying surface of the press screen and the top face surface of the mat furnish to prevent material from sticking to these surfaces.

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

LP is subject to *NESHAP for Plywood and Composite Wood Products* contained in 40 CFR Part 63, Subpart DDDD. The LSL Press is considered part of the affected source per §63.2232(b).

However, LSL is defined as an "Engineered Wood Product" where the product is formed into a billet where the grain of each strand is oriented parallel to the length of the finished product. This is different from, and separate to, "Oriented Strandboard (OSB)" where the product is formed into a panel where the grain of the strands in one layer is oriented perpendicular to the strands in adjacent layers. Therefore, the LSL Press is not considered a "Reconstituted Wood Product Press" which is defined as used in the manufacture of hardboard, medium density fiberboard, particleboard, and oriented strandboard.

The emission limits and monitoring requirements listed in Tables 1B and 7 of Subpart DDDD apply to reconstituted wood product presses (i.e. the OSB Press) but not to the LSL Press.

2. Control Equipment

VOC emissions from the LSL Press may be controlled by the Press RCO/RTO. However, the LSL Press emits far fewer VOCs than the OSB Press. Therefore, LP was able to demonstrate in NSR license A-327-77-3-A that operation of the press RCO/RTO did not represent BACT for economic reasons due to the high cost per ton of VOC emissions reduced.

3. Emission Limits and Streamlining

For the LSL Press, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|-------------------|---|--|---|
| VOC | 5.85 lb/hr (as carbon) | 06-096 CMR 115, BACT (A-327-77-4-A) | 5.85 lb/hr (as carbon) |
| Visible Emissions | 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. | 06-096 CMR 101, §2(B)(3)(d) | 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. |

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the LSL Press shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

| Pollutant | Applicable Emission Limit | Compliance Method | Frequency |
|-------------------|---|--|--------------|
| VOC | 5.85 lb/hr (as carbon) | 40 CFR Part 60, App. A, Method 25 or 25A | As requested |
| Visible Emissions | 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. | Method 9 Observations | As requested |

5. Compliance Assurance Monitoring (CAM)

CAM is not applicable to the LSL Press.

6. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the LSL Press as indicated in the following tables whenever the equipment is operating.

| LSL Press | | | |
|----------------|------------------|------------------------|--|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Operating Time | Hours | Control System | Daily, monthly, and 12-month rolling total |

7. CEMS and COMS

There are no CEMS or COMS required for the LSL Press.

P. LSL Edge Seal Process and OSB Spray Booths

LP uses edge seal and other coatings on both the LSL and OSB products.

Edge seal is a coating applied to the cut edges of the product to minimize the amount of moisture entering into the edge of the product.

VOC emissions from the OSB spray booths are limited to 3.5 tpy. VOC emissions from the LSL edge seal process are limited to 1.1 tpy.

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

LP is subject to *NESHAP for Plywood and Composite Wood Products* contained in 40 CFR Part 63, Subpart DDDD. Finishing operations, including edge sealing and other paint application, is considered part of the affected facility per §63.2232(b).

The edge seal process is considered a “Group 1 miscellaneous coating operation”. Table 3 of Subpart DDDD requires these operations to use “non-HAP coatings” which are defined in §63.2292 as coatings with HAP contents below 0.1% by mass for Occupational Safety and Health Administration-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and below 1.0% by mass for other HAP compounds.

2. Emission Limits and Streamlining

A listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|---------------------------|---------------------------------|--|----------------------------|
| VOC (LSL edge seal) | 1.1 tpy | 06-096 CMR 115, BACT (A-327-77-2-A) | 1.1 tpy |
| VOC (OSB spray booths) | 3.5 tpy | 06-096 CMR 115, BACT (A-327-77-1-N) | 3.5 tpy |

3. Emission Limit Compliance Methods

Compliance with the emission limits associated with the edge seal process shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

| Pollutant | Applicable Emission Limit | Compliance Method | Frequency |
|---------------------------|---------------------------|-------------------|------------------------------------|
| VOC (LSL edge seal) | 1.1 tpy | mass balance | Monthly and 12-month rolling total |
| VOC (OSB spray booths) | 3.5 tpy | mass balance | Monthly and 12-month rolling total |

4. Compliance Assurance Monitoring (CAM)

CAM is not applicable to the LSL edge seal process or OSB spray booths.

5. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the LSL edge seal process and OSB paint booths as indicated in the following table whenever the equipment is operating.

| LSL Edge Seal and OSB Paint Booths | | | |
|---|-------------------------|---|----------------------------------|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Amount of each sealant/paint used | Gallons | logbook | Monthly & 12-month rolling total |
| VOC/HAP content of each sealant/paint | % by mass | documentation from supplier or MSDS/SDS | Recorded for each product |

Q. Pneumatic Systems

Materials, including fines, sawdust, and dust generated by various processes, storage bins, and conveying systems located at the facility, are collected by several Pneumatic Systems made up of enclosures, ductwork, fans, and baghouses for reuse in the process or as fuel for the CHU. LP made modifications to the existing pneumatic systems and installed new pneumatic systems as part of the LSL project. Three new baghouses were installed and one existing baghouse was relocated outdoors. The new and relocated baghouses associated with the LSL project included:

- Dry Fuel Silo Baghouse (System 5 Baghouse) – atop the new dry fuel storage bin
- Dry Bin/LSL Forming Baghouse (System 7 Baghouse) – south of the OSB Formers
- Finishing Area Baghouse (System 8 Baghouse) – near the new finishing area
- Dryer Area Baghouse (System 3 Baghouse) – relocated outdoors, south of the blenders

Other Pneumatic System baghouses located at the facility include the OSB Dry Bin and Forming Baghouse (System 6 Baghouse), the OSB Sander and Trim Saw Baghouse, the Flying Cut-Off Saw Baghouse, and the Saw Line Baghouse. All facility baghouses vent outdoors.

1. Emission Limits and Streamlining

For all pneumatic system baghouses a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

| Pollutant | Applicable Emission Standard(s) | Origin and Authority | Licensed Emission Limit(s) |
|-------------------|---|-----------------------------|---|
| Visible Emissions | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. | 06-096 CMR 101, §2(B)(3)(c) | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. |

2. Emission Limit Compliance Methods

Compliance with the emission limits associated with the pneumatic system baghouses shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

| Pollutant | Applicable Emission Limit | Compliance Method | Frequency |
|-------------------|---|--------------------------|------------------|
| Visible Emissions | 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. | Method 9 Observations | As requested |

3. Periodic/Parameter Monitoring

LP shall monitor and record parameters for each of the pneumatic system baghouses as indicated in the following tables whenever the equipment is operating.

| Pneumatic System Baghouses | | | |
|------------------------------|------------------|--|---|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Pressure Drop | inches of water | Differential pressure across the filter bags | Monitor: Continuously Record: Once per shift |
| Maintenance activity records | Each | Record in logbook | Maintain records documenting maintenance activities performed on the baghouses. |

4. CEMS and COMS

There are no CEMS or COMS required for the pneumatic system and associated baghouses.

R. Facility Annual Emissions

1. Total Annual Emissions

LP is licensed for the following annual emissions, based on a 12 month rolling total.

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

| | PM | PM ₁₀ | SO ₂ | NO _x | CO | VOC ¹ |
|------------------------------------|--------------|------------------|-----------------|-----------------|--------------|------------------|
| 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 |
| LSL Press & OSB Press | - | - | - | - | - | 32.6 |
| Edge Seal Process | - | - | - | - | - | 1.1 |
| MDI Tanks | - | - | - | - | - | Neg. |
| Spray Booths | - | - | - | - | - | 3.5 |
| Diesel Pump Engine | 0.1 | 0.1 | 0.1 | 1.3 | 1.3 | 0.1 |
| Total TPY | 142.4 | 142.4 | 25.3 | 389.2 | 674.7 | 65.6 |

1. VOC as propane plus formaldehyde.

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

Based on the facility's fuel use limits, the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, the global warming potentials contained in 40 CFR Part 98, LP is above the major source threshold of 100,000 tons of CO₂e per year.

III. AMBIENT AIR QUALITY ANALYSIS

LP previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-327-77-1-N, issued on 8/28/06). An additional ambient air quality analysis is not required for this Part 70 License.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-327-70-I-R pursuant to 06-096 CMR 140 and the preconstruction permitting requirements of 06-096 CMR 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to LP pursuant to the Department's preconstruction permitting

requirements in 06-096 CMR 108 or 115 have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such, the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 CMR 115 for making such changes and pursuant to the applicable requirements in 06-096 CMR 140.

For each standard and specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only.**

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD STATEMENTS

- (1) 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 CMR 140]
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege; [06-096 CMR 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 CMR 140]
- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license; [06-096 CMR 140]
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 140]

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

- A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
- B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee.

| Source | Citation | Description | Basis for Determination |
|------------------------------|----------------------------|---|---|
| Dryer RTO & Press RTO/RCO | 40 CFR Part 60, Subpart Dc | NSPS for Small Industrial-Commerical-Institutional Steam Generating Units | These are not "steam generating units" as defined in 40 CFR Part 60, Subpart Dc |
| Dryers | 40 CFR Part 60, Subpart Db | NSPS for Industrial-Commerical-Institutional Steam Generating Units | The term "steam generating unit" does not include process heaters. |
| MDI Storage Tank | 40 CFR Part 60, Subpart Kb | NSPS for Volatile Organic Liquid Storage Vessels | Exempted from applicability per 10/15/03 Federal Register. |
| Phenolic Resin Storage Tanks | 40 CFR Part 60, Subpart Kb | NSPS for Volatile Organic Liquid Storage Vessels | Exempted from applicability per 10/15/03 Federal Register. |
| Facility | 40 CFR Part 63, Subpart U | NESHAP for Group I Polymers and Resins | Facility does not produce Group I polymers and resins. |
| Facility | 40 CFR Part 63, Subpart W | NESHAP for Epoxy Resins Production and Non-Nylon Polyamides Production | Facility does not produce epoxy resins or non-nylon polyamides. |
| Facility | 40 CFR Part 63, Subpart JJ | NESHAP for Wood Furniture Manufacturing Operations | Facility does not produce wood furniture. |

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 CMR 140;
 - B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
 - C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
 - D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 CMR 140]

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.
[06-096 CMR 140]

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (38 M.R.S.A. §347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140. [06-096 CMR 140]
- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 140]
Enforceable by State-only
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S.A. §353-A.
- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 140]
Enforceable by State-only
- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 CMR 140]
- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 CMR 140]
- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing under circumstances representative of the facility's normal process and operating conditions:
 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters,

staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

2. to demonstrate compliance with the applicable emission standards; or
3. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 140]

Enforceable by State-only

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 140]

Enforceable by State-only

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures,

downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

- A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;
- B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 M.R.S.A. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

- C. All other deviations shall be reported to the Department in the facility's semiannual report.
[06-096 CMR 140]

- (11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 140]
- (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [06-096 CMR 140]

- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
- A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
 - B. The compliance status;
 - C. Whether compliance was continuous or intermittent;
 - D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
 - E. Such other facts as the Department may require to determine the compliance status of the source.
- [06-096 CMR 140]

SPECIFIC CONDITIONS

(14) **Central Heating Unit**

A. Allowable Fuels

- 1. The CHU is licensed to fire biomass including wood and bark.
[06-096 CMR 115, BACT (A-327-77-1-N)]
 - 2. Total fuel use in the CHU shall neither exceed 538 tons of biomass per day on a 12-month rolling average basis nor 768 tons of biomass per day on a monthly average basis, based on a higher heating value for the biomass of 4,350 Btu/lb. Compliance with these fuel firing rate limits shall be demonstrated by monitoring and recording the fuel feed rates to the unit. Records documenting compliance with these fuel firing rate limits shall be maintained by LP for a minimum of six (6) years. The records shall be submitted to the Department upon request.
[06-096 CMR 115, BACT (A-327-77-3-A)]
- B. The CHU may be equipped with an emergency vent that may only be used in the event of an equipment malfunction. Use of the emergency vent for startup and shutdown operations is prohibited.
[06-096 CMR 115, BACT (A-327-77-1-N)]

(15) CHU – TOH

A. CHU - TOS Emission Limits

Emissions from the CHU – TOS stack shall not exceed the following limits:

| Pollutant | ppmdv | Origin and Authority | Enforceability |
|-----------------|--------------------------|--|--------------------------|
| NO _x | 200 (see Note 1) | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| CO | 400 (see Notes 3 & 4) | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |

| Pollutant | lb/MMBtu | Origin and Authority | Enforceability |
|------------------|----------------------|---|--------------------------|
| PM | 0.030 | 40 CFR Part 60, Subpart Db §60.43b(h)(1) | Federally Enforceable |
| PM ₁₀ | 0.030 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| NO _x | 0.23 (See Note 2) | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|-------|--|--------------------------|
| PM | 4.6 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| PM ₁₀ | 4.6 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| SO ₂ | 3.8 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| NO _x | 35.2 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| CO | 35.2 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| VOC | 0.60 | 06-096 CMR 115, BACT (A-327-77-4-A) | Federally Enforceable |

Note 1: Corrected to 7% O₂ based on an F factor of 9,600 dscf/MMBtu and on a 30-day rolling average.

Note 2: Based on a one hour average.

Note 3: Corrected to 7% O₂ on a 30-day rolling average.

Note 4: This limit applies at all times except periods of startup, shutdown, and malfunction or if the unit is operating at less than 50% rated capacity.

B. Visible emissions from the CHU – TOS Stack shall not exceed 20% opacity on a six (6)-minute average except for one (1) six (6)-minute period per hour of not more than 27% opacity. This opacity standard shall apply at all times, except during periods of startup, shutdown, and malfunction. [40 CFR Part 60, Subpart Db]

C. Control Equipment

1. Particulate matter (PM, PM₁₀) emissions from the CHU-TOS Stack shall be controlled by the operation and maintenance of a centrifugal cyclone separator followed by an electrostatic precipitator (ESP). LP shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent demonstration of compliance with the licensed particulate emission limits.

Upon written notification to the Department, and in accordance with the Bureau of Air Quality's Air Emission Compliance Test Protocol, LP may perform additional particulate emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall LP be relieved of its obligation to meet its licensed emission limits.
[06-096 CMR 115, BACT (A-327-77-2-A)]

2. The CHU – TOS stack shall have a minimum stack height of 100 feet above ground level. [06-096 CMR 115, BACT (A-327-77-1-N)]

D. Compliance Methods

Compliance with the emission limits listed above for the CHU – TOS stack shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|------------------|----------------------------------|---|-------------------------------------|
| PM | lb/MMBtu and lb/hr | 40 CFR Part 60, App. A, Method 5 | Once every five years (by 12/31/18) |
| PM ₁₀ | lb/MMBtu and lb/hr | 40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A | As requested |
| SO ₂ | lb/hr | 40 CFR Part 60, App. A, Method 6C | As requested |

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|-------------------|---------------------------|--|--|
| NO _x | ppmdv and lb/MMBtu | NO _x CEMS | Continuous (in accordance with 40 CFR Part 60, App. B) |
| | lb/hr | 40 CFR Part 60, App. A, Method 7E | As requested |
| CO | ppmdv | CO CEMS | Continuous (in accordance with 40 CFR Part 60, App. B) |
| | lb/hr | 40 CFR Part 60, App. A, Method 10 | As requested |
| VOC | lb/hr | 40 CFR Part 60, App. A, Method 25 or 25A | As requested |
| Visible Emissions | Percent Opacity | COMS on a 6-minute block average basis | Continuous (in accordance with 40 CFR Part 60, App. B) |

E. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the CHU - TOS and its associated air pollution control equipment as indicated in the following tables whenever the equipment is operating. [06-096 CMR 140, BPT]

| CHU | | | |
|--------------------|------------------|-----------------------------------|---|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Wood fuel use | Tons | Conveyor belt scales (see Note 1) | Daily, monthly, and 12-month rolling total |
| Emergency Vent Use | Hours | Logs (written or electronic) | Maintain records of all emergency vent times. |

Note 1: In the event of equipment failure of the conveyor belt scales, LP may use alternate methods as approved by the Department as a back-up method of determining fuel use.

| ESP on CHU – TOS | | | |
|-------------------------|-------------------------|-------------------------------|---|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Primary Voltage | Volts or kilovolts | Volt meter | Monitor: Continuously Record: Once per shift |
| Secondary Voltage | Volts or kilovolts | Volt meter | Monitor: Continuously Record: Once per shift |
| Primary Current | Amps | Amp meter | Monitor: Continuously Record: Once per shift |
| Secondary Current | Amps | Amp meter | Monitor: Continuously Record: Once per shift |
| Spark rate | sparks/min | ESP control system | Monitor: Continuously Record: Once per shift |

F. CEMS and COMS

LP shall operate and maintain the following continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS) for the CHU – TOS stack:

| Pollutant and Continuous Monitor | Unit of Measurement | Origin and Authority |
|---|----------------------------|--------------------------------------|
| NO _x CEMS | ppmdv & lb/MMBtu | 06-096 CMR 117 and 06-096 CMR 138 |
| CO CEMS | ppmdv | 06-096 CMR 117 |
| Opacity COMS | % | 06-096 CMR 117 |

G. New Source Performance Standards [40 CFR Part 60, Subpart Db]

1. The CHU – TOS Stack is subject to 40 CFR Part 60, Subpart Db. LP shall comply with all applicable requirements contained in 40 CFR Part 60, Subparts Db.
2. 40 CFR Part 60 Subpart Db requires maintaining records of the amount of fuels combusted each day and calculation of annual capacity factor for each calendar quarter. This requirement was directed toward multi-fuel boilers to determine the annual capacity firing fossil fuel. EPA Region I determined this requirement is not meant to apply to 100% wood fired systems. However, LP shall maintain monthly fuel use records and determine an annual capacity factor on a 12-month rolling average basis with the new annual capacity calculated at the end of each month and submitted annually, unless an alternative monitoring approach is approved by the administrator.

H. National Emissions Standards for Hazardous Air Pollutants

The CHU – TOS Stack is subject to 40 CFR Part 63, Subpart DDDDD. LP shall comply with all applicable requirements contained in 40 CFR Part 63, Subparts DDDDD.

(16) **CHU – Dryers**

A. CHU - Dryer Emission Limits

Emissions from the CHU – Dryer stack shall not exceed the following limits:

| Pollutant | gr/dscf | Origin and Authority | Enforceability |
|------------------|----------------|--|--------------------------|
| PM | 0.015 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|---------------------|--|--------------------------|
| PM | 15.6 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| PM ₁₀ | 15.6 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| SO ₂ | 0.43 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| NO _x | 32.9 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| CO | 109.0 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |
| VOC | 2.25 (as carbon) | 06-096 CMR 115, BACT (A-327-77-3-A) | Federally Enforceable |

B. Visible Emissions

1. Visible emissions from the CHU – Dryer stack shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period.
 [06-096 CMR 140, BPT (A-327-70-A-I)]
2. For RTO start-ups during the bake-out process, visible emissions shall not exceed 30% for 2 hours except for 30 minutes which cannot exceed 70%.
 [06-096 CMR 140, BPT (A-327-70-A-I)]

C. Control Equipment

1. Emissions of particulate matter (PM, PM₁₀) from the CHU – Dryer stack shall be controlled by the operation and maintenance of a wet electrostatic precipitator. [06-096 CMR 140, BPT (A-327-72-D-A/R)]
2. Emissions of VOC and HAP from the CHU – Dryer stack shall be controlled by the operation and maintenance of a RTO. [06-096 CMR 140, BPT (A-327-72-D-A/R)]
3. LP is licensed to fire propane or natural gas in the Dryer RTO. [06-096 CMR 140, BPT (A-327-70-A-I)]
4. The maximum heat input into the Dryer RTO shall not exceed 144 gal/hr (13.5 MMBtu/hr) demonstrated by flow meter logs or fuel flow recording charts. [06-096 CMR 140, BPT (A327-70-A-I)]

D. Compliance Methods

Compliance with the emission limits listed above for the CHU – Dryer stack shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|------------------|----------------------------------|---|-------------------------------------|
| PM | gr/dscf and lb/hr | 40 CFR Part 60, App. A, Method 5 | Once every two years (by 12/31/15) |
| PM ₁₀ | lb/hr | 40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A | As requested |
| SO ₂ | lb/hr | 40 CFR Part 60, App. A, Method 6C | As requested |
| NO _x | lb/hr | 40 CFR Part 60, App. A, Method 7E | Once every five years (by 12/31/18) |
| CO | lb/hr | 40 CFR Part 60, App. A, Method 10 | As requested |

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|-------------------|---------------------------|--|-----------------------------------|
| VOC | lb/hr | 40 CFR Part 60, App. A, Method 25 or 25A | As requested |
| Visible Emissions | Percent Opacity | Method 9 Observations | As requested and during bake-outs |

E. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the Dryers and their associated air pollution control equipment as indicated in the following tables whenever the equipment is operating. Periodic monitoring requirements that are required for CAM are indicated as such. [06-096 CMR 140, BPT]

| WESP | | | | |
|------------|-------------------|--------------------|------------------------|---|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Y | Secondary Voltage | Volts or kilovolts | Volt meter | Monitor: Continuously Record: Once per shift |
| Y | Secondary Current | Amps | Amp meter | Monitor: Continuously Record: Once per shift |

| Dryer RTO | | | | |
|------------|--------------------------------|---------------------------------|---|---|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| N | Combustion Chamber Temperature | °F | Thermocouple | Monitor: Continuously Record: 3-hr Average |
| N | Outlet Air Flow | cfm | Flow Monitor | Monitor: Continuously Record: 3-hr Average |
| Y | Bake-out Visible Emissions | % Opacity | Method 9 Observations | Midway through each bake-out cycle. (See Note 1) |
| N | Operating Time | Hours | RTO Control System | Daily, monthly, and calendar year |
| N | Fuel Use | scf (nat gas) gal. (propane) | Fuel meter logs or fuel flow recording charts | Monthly & 12-month rolling total |
| N | Bypass Time | Hours | Logs (written or electronic) | Maintain records of all RTO bypass times. |

Note 1: Visible emissions readings shall be taken every 15 seconds for at least 18 minutes.

F. National Emissions Standards for Hazardous Air Pollutants

The CHU – Dryer stack is subject to 40 CFR Part 63, Subpart DDDD. LP shall comply with all applicable requirements contained in 40 CFR Part 63, Subparts DDDD.

(17) **Fire Pump and TOH Backup Pump**

A. Allowable Operation and Fuels

1. The Fire Pump and TOH Backup Pump are licensed to fire diesel/#2 fuel oil. [06-096 CMR 140, BPT]
2. The Fire Pump and TOH Backup Pump are each limited to 500 hours per year total operation, based on a 12-month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [06-096 CMR 140, BPT]

B. Fuel Sulfur Content

1. The fuel oil sulfur content for the Fire Pump shall be limited to 0.0015% sulfur. [06-096 CMR 140, BPT]
2. The fuel oil sulfur content for the TOH Backup Pump shall be limited to 0.0015% sulfur. [40 CFR Part 60, §60.4207(b)]
3. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 140, BPT]

C. Emissions shall not exceed the following limits [06-096 CMR 140, BPT]:

| Unit | PM (lb/hr) | PM ₁₀ (lb/hr) | SO ₂ (lb/hr) | NO _x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---------------|-----------------------------|----------------------------|----------------------------|---------------|----------------|
| Fire Pump (1.2 MMBtu/hr) diesel | 0.14 | 0.14 | neg | 5.29 | 1.14 | 0.42 |
| TOH Backup Pump (0.3 MMBtu/hr) diesel | 0.04 | 0.04 | neg | 1.32 | 0.29 | 0.11 |

D. Visible Emissions

Visible emissions from the Fire Pump and TOH Backup Pump shall each not exceed 20% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101]

E. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the Fire Pump and TOH Backup Pump as indicated in the following table. [06-096 CMR 140, BPT]

| Fire Pump and TOH Backup Pump | | | |
|--------------------------------------|-------------------------|-------------------------------|------------------------------------|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| fuel oil sulfur content | Percent, by weight | Fuel receipts from supplier | As fuel is purchased |
| Operating time | Hours | Hour Meter | Monthly and 12-month rolling total |

F. The Fire Pump shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:

1. No later than May 3, 2013, LP shall meet the following operational limitations for the Fire Pump:
 - a. Change the oil and filter annually,
 - b. Inspect the air cleaner annually, and
 - c. Inspect the hoses and belts annually and replace as necessary.

A log shall be maintained documenting compliance with the operational limitations.

[40 CFR §63.6603(a) and Table 2(d)]

2. LP has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, LP must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]
3. A non-resettable hour meter shall be installed and operated on the Fire Pump. [40 CFR §63.6625(f)]
4. Maintenance, Testing, and Non-Emergency Operating Situations
 - a. The Fire Pump shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations. These limits are based on a calendar year. Compliance shall be demonstrated by a written log of all engine operating hours. [40 CFR §63.6640(f)]

(18) **Dry Wafer Storage Bins**

A. Dry Wafer Storage Bins Emission Limits

Emissions from the Dry Wafer Storage Bin baghouse shall not exceed the following limits:

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|--------------|--|--------------------------|
| PM | 0.12 | 06-096 CMR 115, BACT (A-327-70-H-A) | Federally Enforceable |

| Pollutant | tpy | Origin and Authority | Enforceability |
|------------------|---------------------|--|--------------------------|
| VOC | 3.1 (see Note 1) | 06-096 CMR 115, BACT (A-327-70-H-A) | Federally Enforceable |

Note 1: Compliance with the VOC tpy limit shall be on a 12-month rolling average basis.

B. Visible Emissions

Visible emissions from the Dry Wafer Storage Bin baghouse shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.
[06-096 CMR 101, §2(B)(3)(c)]

C. Control Equipment

Emissions of particulate matter (PM, PM₁₀) from the Dry Wafer Storage Bins shall be controlled by the operation and maintenance of a baghouse. [06-096 CMR 140, BPT]

D. Compliance Methods

Compliance with the emission limits listed above for the Dry Wafer Storage Bin baghouse shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|-------------------|---------------------------|--|----------------------------------|
| PM | lb/hr | 40 CFR Part 60, App. A, Method 5 | As requested |
| VOC | tpy | Per calculation listed in Note 1 below | Monthly & 12-month rolling total |
| Visible Emissions | Percent Opacity | Method 9 Observations | As requested |

Note 1: Compliance with the VOC tpy limit shall be based on the following calculation:

$$\text{Tons of VOC/year} = \text{hours of operation per year} \times 0.713 \text{ lb/hr} \div 2000 \text{ lb/ton}$$

E. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the Dry Wafer Storage Bin and their associated air pollution control equipment as indicated in the following table whenever the equipment is operating. Periodic monitoring requirements that are required for CAM are indicated as such. [06-096 CMR 140, BPT (A-327-70-H-A)]

| Dry Wafer Storage Bins | | | | |
|------------------------|-----------------|------------------|---------------------------|--|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| N | Operating times | Hours | Control System or Logbook | Daily, Monthly, & 12-month rolling total |

| Dry Wafer Storage Bins Baghouse | | | | |
|---------------------------------|------------------------------|------------------|--|--|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Y | Pressure Drop | inches of water | Differential pressure across the filter bags | Monitor: Continuously Record: Once per shift |
| Y | Maintenance activity records | Each | Record in logbook | Maintain records documenting maintenance activities performed on the baghouse. |

(19) **Flying Cut-Off Saws**

A. Flying Cut-Off Saws Emission Limits

Emissions from the Flying Cut-Off Saws baghouse shall not exceed the following limits:

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|--------------|--|--------------------------|
| PM | 0.58 | 06-096 CMR 115, BACT (A-327-70-H-A) | Federally Enforceable |

| Pollutant | tpy | Origin and Authority | Enforceability |
|------------------|------------|--|--------------------------|
| VOC | 8.6 | 06-096 CMR 115, BACT (A-327-70-H-A) | Federally Enforceable |

B. Visible Emissions

Visible emissions from the Flying Cut-Off Saws baghouse shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.
[06-096 CMR 101, §2(B)(3)(c)]

C. Control Equipment

Emissions of particulate matter (PM, PM₁₀) from the Flying Cut-Off Saws shall be controlled by the operation and maintenance of a baghouse. [06-096 CMR 140, BPT]

D. Compliance Methods

Compliance with the emission limits listed above for the Flying Cut-Off Saws baghouse shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|-------------------|---------------------------|--|----------------------------------|
| PM | lb/hr | 40 CFR Part 60, App. A, Method 5 | As requested |
| VOC | tpy | Per calculation listed in Note 1 below | Monthly & 12-month rolling total |
| Visible Emissions | Percent Opacity | Method 9 Observations | As requested |

Note 1: Compliance with the VOC tpy limit shall be based on the following calculation:

$$\text{Tons of VOC/year} = \text{hours of operation per year} \times 1.95 \text{ lb/hr} \div 2000 \text{ lb/ton}$$

E. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the Flying Cut-Off Saws and their associated air pollution control equipment as indicated in the following table whenever the equipment is operating. Periodic monitoring requirements that are required for CAM are indicated as such. [06-096 CMR 140, BPT (A-327-70-H-A)]

| Flying Cut-Off Saws | | | | |
|---------------------|-----------------|------------------|---------------------------|--|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| N | Operating times | Hours | Control System or Logbook | Daily, Monthly, & 12-month rolling total |

| Flying Cut-Off Saws Baghouse | | | | |
|------------------------------|------------------------------|------------------|--|--|
| CAM? (Y/N) | Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Y | Pressure Drop | inches of water | Differential pressure across the filter bags | Monitor: Continuously Record: Once per shift |
| Y | Maintenance activity records | Each | Record in logbook | Maintain records documenting maintenance activities performed on the baghouse. |

(20) **OSB Press**

A. OSB Press Limits

1. Emissions from the OSB Press shall not exceed the following limits when the oxidation system is operating as an RCO:

| Pollutant | gr/dscf | Origin and Authority | Enforceability |
|-----------|---------|---------------------------------------|--------------------------|
| PM | 0.015 | 06-096 CMR 140, BPT (A-327-70-F-A) | Federally Enforceable |

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|---------------------|---------------------------------------|--------------------------|
| PM | 12.3 | 06-096 CMR 140, BPT (A-327-70-F-A) | Federally Enforceable |
| PM ₁₀ | 12.3 | 06-096 CMR 140, BPT (A-327-70-F-A) | Federally Enforceable |
| SO ₂ | 1.5 | 06-096 CMR 140, BPT (A-327-70-F-A) | Federally Enforceable |
| NO _x | 19.9 | 06-096 CMR 140, BPT (A-327-70-F-A) | Federally Enforceable |
| CO | 9.5 | 06-096 CMR 140, BPT (A-327-70-F-A) | Federally Enforceable |
| VOC | 1.75 (as carbon) | 06-096 CMR 140, BPT (A-327-70-F-A) | Federally Enforceable |

2. Emissions from the OSB Press shall not exceed the following limits when the oxidation system is operating as an RTO:

| Pollutant | gr/dscf | Origin and Authority | Enforceability |
|-----------|---------|---------------------------------------|--------------------------|
| PM | 0.015 | 06-096 CMR 140, BPT (A-327-72-E-M) | Federally Enforceable |

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|---------------------|---|--------------------------|
| PM | 12.3 | 06-096 CMR 140, BPT (A-327-72-E-M) | Federally Enforceable |
| PM ₁₀ | 12.3 | 06-096 CMR 140, BPT (A-327-72-D-A/R) | Federally Enforceable |
| SO ₂ | 1.5 | 06-096 CMR 140, BPT (A-327-70-H-A) | Federally Enforceable |
| NO _x | 20.5 | 06-096 CMR 140, BPT (A-327-72-D-A/R) | Federally Enforceable |
| CO | 9.6 | 06-096 CMR 140, BPT (A-327-70-H-A) | Federally Enforceable |
| VOC | 1.75 (as carbon) | 06-096 CMR 140, BPT (A-327-72-E-M) | Federally Enforceable |

3. Production of OSB shall not exceed 600 tons of finished product per day averaged over a rolling seven day period.
[06-096 CMR 140, BPT (A-327-70-H-A)]

B. Visible Emissions

1. Visible emissions from the OSB Press shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3 hour period.
[06-096 CMR 140, BPT (A-327-70-A-I)]
2. For RCO/RTO start-ups during the bake-out process, visible emissions shall not exceed 30% for 2 hours except for 30 minutes which cannot exceed 70%. [06-096 CMR 140, BPT (A-327-70-A-I)]

C. Control Equipment

1. Emissions of VOC and HAP from the OSB Press shall be controlled by the operation and maintenance of a RCO/RTO. The main forming line shall not operate unless the Press RCO/RTO is operating. For safety and fire hazard concerns, LP shall be allowed a maximum of 15minutes from the time the RCO/RTO goes down to shut down the production line.
[06-096 CMR 140, BPT (A-327-70-A-I)]
2. LP is licensed to fire propane or natural gas in the Press RCO/RTO.
[06-096 CMR 140, BPT (A-327-70-F-A)]
3. When operating as an RCO, the maximum heat input into the Press RCO/RTO shall not exceed 77.3 gal/hr (7.0 MMBtu/hr) demonstrated by flow meter logs or fuel flow recording charts.
[06-096 CMR 140, BPT (A327-70-F-A)]
4. When operating as an RTO, the maximum heat input into the Press RCO/RTO shall not exceed 120 gal/hr (11.2MMBtu/hr) demonstrated by flow meter logs or fuel flow recording charts.
[06-096 CMR 140, BPT (A327-70-F-A)]
5. LP shall check the activity level of a representative sample of the RCO catalyst at least once every 12 months.
[06-096 CMR 140, BPT (A-327-70-F-A)]

D. Compliance Methods

Compliance with the emission limits listed above for the OSB Press shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|-------------------|---------------------------|---|-------------------------------------|
| PM | gr/dscf and lb/hr | 40 CFR Part 60, App. A, Method 5 | Once every two years (by 12/31/15) |
| PM ₁₀ | lb/hr | 40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A | As requested |
| SO ₂ | lb/hr | 40 CFR Part 60, App. A, Method 6C | As requested |
| NO _x | lb/hr | 40 CFR Part 60, App. A, Method 7E | Once every five years (by 12/31/18) |
| CO | lb/hr | 40 CFR Part 60, App. A, Method 10 | As requested |
| VOC | lb/hr | 40 CFR Part 60, App. A, Method 25 or 25A | Every other year (by 12/31/15) |
| Visible Emissions | Percent Opacity | Method 9 Observations | As requested and during bake-outs |

E. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the OSB Press and its associated air pollution control equipment as indicated in the following table whenever the equipment is operating. [06-096 CMR 140, BPT]

| OSB Press | | | |
|-----------------|---|------------------------|-------------------------------|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Production Rate | Tons of finished product per day on a 7-day rolling avg | Production Records | Daily & 7-day rolling average |

| Press RCO/RTO | | | |
|--------------------------------|---------------------------------|---|---|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Combustion Chamber Temperature | °F | Thermocouple | Monitor: Continuously Record: 3-hr Average |
| Outlet Air Flow | cfm | Flow Monitor | Monitor: Continuously Record: 3-hr Average |
| Bake-out Times | Hours | RCO/RTO Control System | Each occurrence |
| Bake-out Visible Emissions | % Opacity | Method 9 Observations | Midway through each bake-out cycle. (See Note 1) |
| Operating Time | Hours | RCO/RTO Control System | Daily, monthly, and calendar year |
| Maintenance & Malfunctions | Each | Records of dates and durations | Each occurrence |
| Fuel Use | scf (nat gas) gal. (propane) | Fuel meter logs or fuel flow recording charts | Monthly & 12-month rolling total |

Note 1: Visible emissions readings shall be taken every 15 seconds for at least 18 minutes.

F. National Emissions Standards for Hazardous Air Pollutants

The OSB Press is subject to 40 CFR Part 63, Subpart DDDD. LP shall comply with all applicable requirements contained in 40 CFR Part 63, Subparts DDDD.

(21) **LSL Press**

A. LSL Press Limits

1. Emissions from the LSL Press shall not exceed the following limits:

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|---------------------|--|--------------------------|
| VOC | 5.85 (as carbon) | 06-096 CMR 115, BACT (A-327-77-4-A) | Federally Enforceable |

2. LP shall not operate the LSL Press more than 8,550 hours per year on a 12-month rolling total basis. [06-096 CMR 115, BACT (A-327-77-3-A)]

B. Visible Emissions

Visible emissions from the LSL Press shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. [06-096 CMR 101, §2(B)(3)(d)]

C. Control Equipment

Operation of the RCO/RTO to control emissions from the LSL Press shall be at LP's discretion unless necessary to maintain compliance with the VOC emission limit of 5.85 lb/hr (as carbon) or with some other applicable requirement. [06-096 CMR 115, BACT (A-327-77-3-A)]

D. Compliance Methods

Compliance with the emission limits listed above for the LSL Press shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|-------------------|----------------------------------|--|------------------|
| VOC | lb/hr | 40 CFR Part 60, App. A, Method 25 or 25A | As requested |
| Visible Emissions | Percent Opacity | Method 9 Observations | As requested |

E. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the LSL Press as indicated in the following table whenever the equipment is operating. [06-096 CMR 140, BPT]

| LSL Press | | | |
|------------------|-------------------------|-------------------------------|--|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Operating Time | Hours | Control System | Daily, monthly, and 12-month rolling total |

F. National Emissions Standards for Hazardous Air Pollutants

The LSL Press is subject to 40 CFR Part 63, Subpart DDDD. LP shall comply with all applicable requirements contained in 40 CFR Part 63, Subparts DDDD.

(22) **LSL Edge Seal Process and OSB Paint Booths**

A. Emission Limits

Emissions from the LSL Edge Seal Process and OSB Paint Booths shall not exceed the following limits:

| Pollutant | tpy | Origin and Authority | Enforceability |
|---------------------------|-----|--|--------------------------|
| VOC (LSL Edge Seal) | 1.1 | 06-096 CMR 115, BACT (A-327-77-2-A) | Federally Enforceable |
| VOC (OSB Spray Booths) | 3.5 | 06-096 CMR 115, BACT (A-327-77-1-N) | Federally Enforceable |

B. Compliance Methods

Compliance with the emission limits listed above for the LSL Edge Seal Process and OSB Paint Booths shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|-----------|---------------------------|-------------------|------------------------------------|
| VOC | tpy | mass balance | Monthly and 12-month rolling total |

C. Periodic/Parameter Monitoring

LP shall monitor and record parameters for the LSL Edge Seal Process and OSB Paint Booths as indicated in the following table.
 [06-096 CMR 140, BPT]

| LSL Edge Seal Process and OSB Paint Booths | | | |
|--|------------------|---|----------------------------------|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Amount of each sealant/paint used | Gallons | logbook | Monthly & 12-month rolling total |
| VOC/HAP content of each sealant/paint | % by mass | documentation from supplier or MSDS/SDS | Recorded for each product |

D. National Emissions Standards for Hazardous Air Pollutants

1. The LSL Edge Seal Process and OSB Paint Booths are subject to 40 CFR Part 63, Subpart DDDD. LP shall comply with all applicable requirements contained in 40 CFR Part 63, Subparts DDDD.
2. LP shall only use “non-HAP coatings” as defined in 40 CFR Part 63, §63.2292 in the LSL Edge Seal Process and OSB Paint Booths.

(23) **Pneumatic Systems**

A. Visible Emissions

Visible emissions from each pneumatic system baghouse shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.
[06-096 CMR 101, §2(B)(3)(c)]

B. Control Equipment

Emissions of particulate matter (PM, PM₁₀) from LP’s pneumatic systems shall be controlled by the operation and maintenance of baghouses.
[06-096 CMR 140, BPT]

C. Compliance Methods

Compliance with the emission limits listed above for the pneumatic system baghouses shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

| Pollutant | Unit of Emission Standard | Compliance Method | Frequency |
|-------------------|----------------------------------|--------------------------|------------------|
| Visible Emissions | Percent Opacity | Method 9 Observations | As requested |

D. Periodic/Parameter Monitoring

LP shall monitor and record parameters for each of the pneumatic system baghouses as indicated in the following table whenever the equipment is operating. [06-096 CMR 140, BPT]

| Pneumatic System Baghouses | | | |
|-----------------------------------|-------------------------|--|---|
| Parameter | Units of Measure | Monitoring Tool/Method | Frequency |
| Pressure Drop | inches of water | Differential pressure across the filter bags | Monitor: Continuously Record: Once per shift |
| Maintenance activity records | Each | Record in logbook | Maintain records documenting maintenance activities performed on the baghouses. |

(24) **Annual VOC Emissions**

LP shall maintain records demonstrating that annual VOC emissions from the facility do not exceed 65.6 tpy (as propane plus formaldehyde) on a 12-month rolling total basis. [06-096 CMR 115 BACT (A-327-77-3-A)]

(25) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour. [06-096 CMR 101]

(26) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

(27) **Parameter Monitor General Requirements** [06-096 CMR 140 and 117]

A. Parameter monitors required by this license shall be installed, operated, maintained, and calibrated in accordance with manufacturer recommendations or as otherwise required by the Department.

- B. Parameter monitors required by this license shall continuously monitor data at all times the associated emissions unit is in operation. "Continuously" with respect to the operation of parameter monitors required by this license means providing equally spaced data points with at least one valid data point in each successive 15-minute period. A minimum of three valid 15-minute periods constitute a valid hour.
- C. Each parameter monitor must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the associated emissions unit operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

Enforceable by State-only

(28) CEMS Recordkeeping

- A. The licensee shall maintain records documenting that all CEMS and COMS are continuously accurate, reliable and operated in accordance with 06-096 CMR 117 (as amended), 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F;
- B. The licensee shall maintain records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P; and
- C. The licensee shall maintain records of other data indicative of compliance with the applicable emission standards for those periods when the CEMS or COMS were not in operation or produced invalid data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard.

[06-096 CMR 140]

Enforceable by State-only

(29) Compliance Assurance Monitoring (CAM) – General Requirements

- A. The licensee shall operate and monitor all emission units and their associated control equipment in accordance with the approved CAM Plan.
[40 CFR Part 64]
- B. Any excursion shall be reported in semiannual reports. If excursions occur, the licensee must also certify intermittent compliance with the emission limits

- for the control device monitored in the annual compliance certification. [40 CFR Part 64]
- C. Upon detecting an excursion, the licensee shall restore normal operation of the control equipment as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR 64.7(d)]
 - D. Prior to making any changes to the approved CAM plan, the licensee shall notify the Department and, if necessary, submit a proposed license modification application to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7(e)]
 - E. Any change of the target level shall be submitted in a letter to the Department for written approval. [06-096 CMR 140, BPT]

(30) **Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS), and Continuous Opacity Monitoring Systems (COMS) required by this license. [06-096 CMR 117]

- A. All control equipment downtimes and malfunctions;
- B. All CEMS or COMS downtimes and malfunctions;
- C. All parameter monitor downtimes and malfunctions;
- D. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;
 - 1. Standard exceeded;
 - 2. Date, time, and duration of excess event;
 - 3. Amount of air contaminant emitted in excess of the applicable emission standard expressed in the units of the standard;
 - 4. A description of what caused the excess event;
 - 5. The strategy employed to minimize the excess event; and
 - 6. The strategy employed to prevent reoccurrence.
- E. A report certifying there were no excess emissions, if that is the case.

(31) **Semiannual Reporting** [06-096 CMR 140]

- A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.
- B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.

- C. Each semiannual report shall include a summary of the periodic and CAM monitoring required by this license.
- D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(32) Annual Compliance Certification

LP shall submit an annual compliance certification to the Department and EPA in accordance with Standard Condition (13) of this license. The annual compliance certification is due January 31 of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 CMR 140]

(33) Annual Emission Statement

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

- A. A computer program and accompanying instructions supplied by the Department; or
- B. A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted by the date as specified in 06-096 CMR 137.

[06-096 CMR 137]

(34) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

| <u>Origin and Authority</u> | <u>Requirement Summary</u> | <u>Enforceability</u> |
|-----------------------------|----------------------------------|---------------------------|
| 06-096 CMR 102 | Open Burning | - |
| 06-096 CMR 109 | Emergency Episode Regulation | - |
| 06-096 CMR 110 | Ambient Air Quality Standard | - |
| 06-096 CMR 116 | Prohibited Dispersion Techniques | - |
| 38 M.R.S.A. §585-B, §§5 | Mercury Emission Limit | Enforceable by State-only |

(35) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs.

[40 CFR, Part 82, Subpart F]

(36) **Asbestos Abatement**

When undertaking Asbestos abatement activities, LP shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(37) **Expiration of a Part 70 license**

- A. LP shall submit a complete Part 70 renewal application at least 6 months prior, but no more than 18 months prior, to the expiration of this air license.
- B. Pursuant to Title 5 MRSA §10002, and 06-096 CMR 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under 06-096 CMR 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

Louisiana-Pacific Corporation
Aroostook County
New Limerick, Maine
A-327-70-I-R

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Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

(38) **New Source Review**

LP is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emissions license and the NSR requirements remain in effect even if this 06-096 CMR 140 Air Emissions License, A-327-70-I-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 26 DAY OF November, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Maure Allen Robert Conne for
PATRICIA W. AHO, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

[Note: If a complete renewal application as determined by the Department, is submitted at least 6 months prior to expiration but no earlier than 18 months, then pursuant to Title 5 MRSA §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the renewal of the Part 70 license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 5/27/05

Date of application acceptance: 6/10/05

Date filed with the Board of Environmental Protection:

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

