STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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DEPARTMENT ORDER

Irving Forest Products, Inc. **Aroostook County** **Nashville Plantation, Maine** **A-314-70-F-R/A**	**Departmental** **Findings of Fact and Order** **Part 70 Air Emission License** **Renewal and Amendment**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

FACILITY	**Irving Forest Products, Inc. (Irving) – Ashland Sawmill**
LICENSE TYPE	Part 70 License Renewal and Part 70 Significant License Modification
NAICS CODES	321912 (Cut Stock, Resawing Lumber, and Planing), 321113 (Sawmills), and 321999 (All Other Miscellaneous Wood Product Manufacturing)
NATURE OF BUSINESS	Wood Products
FACILITY LOCATION	1218 Portage Road, Nashville Plantation, ME 04732

Irving Forest Products, Inc. (Irving) is a lumber mill that receives round wood logs and processes them into lumber. Equipment at this facility includes boilers, a wood yard, a sawmill, a planer mill, and lumber kilns.

Irving has the potential to emit more than 100 TPY of carbon monoxide (CO) and more than 50 TPY of volatile organic compounds (VOC); therefore, the source is a major source for criteria pollutants. Irving does not have the potential to emit 10 TPY or more of a single hazardous air pollutant (HAP) or 25 TPY or more of combined HAP; therefore, the source is an area source for HAP.

B. Emission Equipment

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

Boilers

Equipment	Max. Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (lb/hr)	Fuel Type, % sulfur	Manuf. Date	Install. Date	Stack #
Boiler #4	25.7	5,711	Biomass*, negl., Spill Material**, 0.0015%	1997	2014	4
Boiler #5	25.7	5,711		2008	2014	5
Boiler #6	23	5,200	Biomass*, negl.	2018***	2018***	6

*4,500 Btu/lb, 50% moisture
**Oil soaked sawdust, wood chips, and absorbent pads from on-site spill clean-up activities, up to 5,000 gal/yr, total
***Estimated

Irving also has a waste oil burner that is less than 1 MMBtu/hr and thus considered an insignificant activity per *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140, Appendix B. The rule chapters *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860, and *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101, still apply to the waste oil burner.

Boiler #2, formerly included on Air Emission License A-314-70-E-R (1/11/2011), has been removed from the site and is hereby removed from this air emission license.

Fire Pump

Equipment	Max. Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Manuf. Date	Install. Date
Fire Pump #1*	1.7	12	Distillate fuel, 0.0015%	1967	1967

*Previously referred to as Emergency Generator 1 in NSR license A-314-77-1-A (10/25/2013)

Irving currently has two other emergency fire pumps of similar vintage to Fire Pump #1 that are inoperable and only used as necessary to supply parts for Fire Pump #1; therefore, they will not be discussed further in this air emission license.

Process Equipment

Equipment	Production Rate	Pollution Control Equipment	Stack
Planer Mill	145 MMBF/year	Pneumatic conveyance and cyclone	Planer Mill cyclone

Equipment	Production Rate	Pollution Control Equipment	Stack
Sawmill	145 MMBF/year	Pneumatic conveyance and cyclone	Sawmill cyclone
Wood Yard	175 MMBF total capacity	-	Fugitive
Lumber Drying Kilns (3)	145 MMBF/year	-	Fugitive

Table Note: MMBF = million board feet

Tank #1, formerly included on Air Emission License A-314-70-E-R (1/11/2011), has been removed from the site and is hereby removed from this air emission license.

Irving operates two aqueous-based parts washers. The cleaning solution contains less than 5% VOC, it does not meet the definition of solvent cleaning machine, and there are no applicable requirements in *Solvent Cleaners*, 06-096 C.M.R. ch. 130. Therefore, it is considered an insignificant activity and mentioned for completeness purposes only.

Irving 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 06-096 C.M.R. ch. 140.

C. Definitions

Biomass. For the purposes of this license and in accordance with 40 Code of Federal Regulations (C.F.R.) Part 63, Subpart JJJJJJ, *biomass* means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); and vegetative agricultural and silvicultural materials, such as logging residues (slash). This definition also includes wood as defined in 40 C.F.R. Part 60, Subpart Dc.

Distillate Fuel. For the purposes of this license, *distillate fuel* means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application for Irving is for the renewal of their existing Part 70 Air Emission License. Pursuant to 06-096 C.M.R. ch. 140, § 2.A., Irving has also requested incorporation into the Part 70 license the relevant terms and conditions of the following NSR licenses issued to the facility pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115:

NSR License	Date Issued	Summary
A-314-77-1-A	October 25, 2013	Installation of two new biomass boilers, two new lumber kilns, new sawmill and planer mill equipment, and an existing fire pump and the removal of Boiler #1, nine lumber kilns, and old sawmill and planer mill equipment
A-314-77-2-M	August 1, 2014	Addition of distillate fuel-soaked sawdust, wood chips, and absorbent pads resulting from the clean-up of small spills as a fuel source for Boilers #4 and #5
A-314-77-3-A	November 6, 2016	Installation of a new biomass boiler and a new lumber drying kiln and an increase in the facility's VOC limit from 83.4 TPY to 93.0 TPY
A-314-77-4-M	December 5, 2017	18-month extension of the timeframe for commencing construction of Boiler #6 from May 6, 2018, to November 6, 2019

Additionally, Irving has requested to remove Boiler #2 from their license; therefore, this license is considered to be a Part 70 license renewal with the incorporation of NSR requirements and removal of Boiler #2 via a Part 70 significant license modification.

E. Facility Description

Irving's manufacturing process makes lumber from whole logs. The logs are debarked, sawed, chipped, re-sawed, and sorted in the Sawmill. Next, the lumber is dried in kilns by applying various cycles of indirect heat and air flow to the stacked lumber. The kiln-dried lumber then goes to the Planer Mill where it is planed, trimmed, cut, chipped, graded, and sorted. Finished wood products are then stored in the Wood Yard until ready to ship. Also stored in the Wood Yard are new whole logs waiting to go to the Sawmill and cut lumber ready for the Lumber Drying Kilns. Irving estimates the Wood Yard can hold approximately 175 million board feet (MMBF) of lumber. Annually, the facility has the capacity to produce 145 MMBF of kiln-dried lumber, consisting mainly of spruce and fir wood species.

F. General Facility Requirements

Irving is subject to the 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 C.M.R. ch. 101	Visible Emissions Regulation
06-096 C.M.R. ch. 102	Open Burning
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard
06-096 C.M.R. ch. 105	General Process Source Particulate Emission Standard
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation
06-096 C.M.R. ch. 109	Emergency Episode Regulations
06-096 C.M.R. ch. 110	Ambient Air Quality Standards
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques
06-096 C.M.R. ch. 117	Source Surveillance – Emissions Monitoring
06-096 C.M.R. ch. 137	Emission Statements
06-096 C.M.R. ch. 140	Part 70 Air Emission License Regulations
06-096 C.M.R. ch. 143	New Source Performance Standards
06-096 C.M.R. ch. 144	National Emission Standards for Hazardous Air Pollutants
40 C.F.R. Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 63, Subpart JJJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
40 C.F.R. Part 70	State Operating Permit Programs

Note: C.M.R. = Code of Maine Regulations
C.F.R. = Code of Federal Regulations

G. Units of Measurement

The following units of measurement are used in this license:

Btu/lb	British Thermal Units per pound
gal/yr	gallons per year
hrs/yr	hours per year
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
lb/ton	pounds per ton
m^3	cubic meters
MBF/yr	thousand board-feet per year
MMBF/yr	million board-feet per year
MMBtu/hr	million British Thermal Units per hour
TPY	tons 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 *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for 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)

Irving is not subject to *Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides,* 06-096 C.M.R. ch. 138 (NO_x RACT) because Irving does not have the potential to emit quantities of NO_X equal to or greater than 100 TPY.

C. VOC RACT (Reasonably Available Control Technology)

Irving is not subject to *Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds,* 06-096 C.M.R. ch. 134 (VOC RACT). Although Irving has the potential to emit quantities of VOC equal to or greater than 40 TPY, those emission come from units that are specifically exempted from VOC RACT. This includes units exempt due to VOCs which come from the incomplete combustion of any material given that it is not burned in oxygen-deficient conditions by design (Boilers #4-6) and from units that are specifically exempted by type (Lumber Drying Kilns #1-3 and the Wood Yard). [06-096 C.M.R. ch. 134, § 1.C.(4) & (6)]

Additionally, Irving underwent a VOC RACT alternative analysis in April 1994 that addressed VOC emission from all sources. The determination at that time concluded neither add-on pollution control equipment nor pollution prevention measures were required for the Sawmill and Planer Mill because the operations did not include the addition of chemicals or large amounts of heat, and the emissions were biogenic in nature and did not contribute significantly to total facility VOC emissions.

D. Mandatory Greenhouse Gas (GHG) Reporting

Mandatory Greenhouse Gas Reporting, 40 C.F.R. Part 98, contains GHG reporting and related monitoring and recordkeeping requirements, and is applicable to the owners/operators of any facility which falls into any one of the following three categories, per *General Provisions, Who must report?*, 40 C.F.R. § 98.2.

(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 CO_2e 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 CO_2e or more per year in combined emissions from all stationary fuel combustion sources.

Based on the categories listed above, Irving is not subject to 40 C.F.R. Part 98. The facility is not part of a source category listed in paragraphs (a)(1) or (a)(2) above, nor does Irving meet all three of the conditions listed in paragraph (a)(3) above. [40 C.F.R. § 98.2(b)(2)]

E. Compliance Assurance Monitoring (CAM)

Irving is not subject to *Compliance Assurance Monitoring,* 40 C.F.R. Part 64. Irving does not have any units that meet all three of the following required criteria: emission limits, a control device to meet the limits, and pre-control emissions greater than 100 TPY for any pollutant. [40 C.F.R. § 64.2(a)]

F. Hazardous Air Pollutants (HAP)

HAP calculations were performed based on maximum licensed values for Boilers #4-6, the Lumber Drying Kilns, and Sawmill/Planer Mill operations. Potential total HAPs were 24.4 TPY (7.13 TPY from biomass firing, 16.54 TPY from kilns, and 0.7 TPY from sawing), and the highest single HAP was 9.3 TPY (methanol from the Lumber Drying Kilns). These values are below the major source thresholds of 25 TPY total HAPs and 10 TPY of a single HAP; therefore, Irving is an area source for HAP.

The HAP calculations were based on the following:

Source	Basis for Calculation
Biomass	• AP-42 Tables 1.6-3 and 1.6-4, dated September 2003 • 41,500 tpy of biomass for Boilers #4-6 (combined)
Kilns	• NCASI Handbook of Substance-Specific Information for National Pollutant Release Inventory Reporting ("NPRI Handbook") using the average factor for black spruce and white spruce • Potential production of 145 MMBF/yr of spruce and fir lumber
Sawmill	• Report titled *Softwood Lumber – Pacific Northwest Region*, by Michael Milota, dated June 1, 2004

By demonstrating compliance with the fuel use limits for Boilers #4-6 and the throughput limit for the Lumber Drying Kilns, Irving will also be in compliance with the major source HAP limits of 9.9 TPY for any single HAP and 24.9 TPY for all HAPs combined and the facility will maintain its status as an area source of HAP.

G. Parameter Monitors

Irving does not have any equipment subject to the use of parameter monitors.

H. CEMS and COMS

Irving does not have any equipment subject to the use of a Continuous Emission Monitoring System (CEMS) or a Continuous Opacity Monitoring System (COMS).

I. Boilers #4, #5, and #6

Boilers #4 and #5 are KMW boilers manufactured in 1997 and 2008, respectively, and installed at the facility in 2014 as part of the mill modernization project addressed in NSR License A-314-77-1-A (10/25/2013). Each unit has a nominal maximum design heat input capacity of 25.7 MMBtu/hr, is capable of generating 20,000 lb/hr of steam, and is operated to generate steam used in the lumber drying process, for log conditioning, and for space heating of the buildings. Boiler #6 is a 23 MMBtu/hr KMW biomass boiler that will be installed in late 2018, and was addressed in NSR Licenses A-314-77-3-A (11/6/2016) and A-314-77-4-M (12/5/2017). Boiler #6 will be used as a seasonal boiler during the colder months to heat the log pond and Sawmill and to provide supplemental steam as needed. This arrangement will allow the steam produced by Boilers #4 and #5 to be dedicated to the drying of lumber.

Boilers #4 and #5 are both licensed to fire biomass consisting of bark, wet wood, and sawdust, as well as distillate fuel absorbed in sawdust, wood chips, and absorbent pads from on-site spill clean-up activities, with facility-wide limits of 35,000 TPY (at 50% moisture content with a heat content of approximately 4,500 Btu/lb) and 5,000 gal/yr, respectively, on a 12-month rolling total basis. Boiler #6 will fire biomass consisting of bark, wet wood, and sawdust, with a fuel limit of 6,500 TPY of biomass (50% moisture content with a heat content of approximately 4,500 Btu/lb) on a 12-month rolling total basis.

Documentation relating to biomass fired in Boilers #4, #5, and #6 shall include records of fuel use kept on a 50% moisture basis using the formula below, when necessary, to convert fuel use records to 50% moisture. Biomass moisture content shall be measured once per month. Records of fuel use shall be kept on a monthly and 12-month rolling total basis and shall be calculated based on actual steam production or other methods approved by the Department.

Tons biomass at 50% = (Tons of biomass at M%) x [(100-M)/50]

Where M = the actual moisture content of the biomass fired

The addition of distillate fuel-soaked sawdust, wood chips, and absorbent pads as a fuel for Boilers #4 and #5 was addressed in NSR License A-314-77-2-M (8/1/2014). Documentation relating to distillate fuel-soaked material fired in Boilers #4 and #5 shall include the origin of the spill and the estimated volume of distillate fuel spill product fired. For recordkeeping purposes, one drum of distillate fuel-soaked sawdust, wood chips, and absorbent pads shall be considered to be 55 gallons of distillate fuel spill product. The spilled distillate fuel shall be from on-site or facility related occurrences.

Emissions from Boilers #4 and #5 exit through identical stacks #4 and #5, which both have an inside diameter of 1.74 feet and an above ground level height of 100 feet. Emissions from Boilers #4 and #5 shall exhaust through separate multiclone collectors for the control of particulate matter. Both units use a common ash collection system. Emissions from Boiler #6 will exit through its own 1.7-foot diameter, 100-foot above ground level stack, Stack #6, and will exhaust through a multiclone collector prior to the stack for control of particulate matter.

1. New Source Performance Standards (NSPS)

   Boilers #4, #5, and #6 are all subject to the NSPS titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc. These standards apply to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989. [40 C.F.R. § 60.40c(a)]

Irving shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers #4, #5, and #6 including, but not limited to, the following:

a. Boilers #4 and #5

(1) Notification

Irving shall submit notification to EPA and the Department of the dates of construction and actual start-up. These notifications shall include the design heat input capacity of the boiler and identification of fuels to be combusted. Irving has submitted these notifications to EPA and the Department. [40 C.F.R. § 60.48c(a)]

(2) Recordkeeping

(i) Irving shall maintain records of the amount of each fuel combusted during each calendar month. [40 C.F.R. § 60.48c(g)(2)]
(ii) All records required under 40 C.F.R. § 60.48c shall be maintained for a minimum of two years. This retention period shall be streamlined to the retention period of six years required by Condition (6) of this air emission license. [40 C.F.R. § 60.48c(i)]

b. Boiler #6

(1) Irving shall submit notification to EPA and the Department of the dates of construction and actual start-up of Boiler #6. These notifications shall be postmarked no later than 30 days and 15 days after such dates, respectively. The notifications shall include the design heat input capacity of the boiler and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)]
(2) Irving shall record and maintain records of the amount of each fuel combusted in Boiler #6 during each calendar month. [40 C.F.R. § 60.48c(g)(2)]
(3) All records required under 40 C.F.R. § 60.48c shall be maintained for a minimum of two years. This retention period shall be streamlined to the retention period of six years required by Condition (6) of this air emission license. [40 C.F.R. § 60.48c(i)]
(4) The following address for EPA shall be used for any reports or notifications required to be copied to them:

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

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

Boilers #4, #5, and #6 are all subject to *NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ. Boilers #4 and #5 are considered existing biomass boilers rated greater than 10 MMBtu/hr without oxygen trim systems and Boiler #6 is considered a new, seasonal biomass boiler rated greater than 10 MMBtu/hr. [40 C.F.R. §§ 63.11193, 63.11194, and 63.11200]

Irving shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boilers #4, #5, and #6 including, but not limited to, the following:

a. General Compliance Requirement

At all times Irving must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require Irving to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.11205(a)]

b. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification submittal for Boilers #4 and #5 was due to EPA. Irving submitted the Initial Notification for Boilers #4 and #5 to EPA on May 7, 2018. An amendment to the Initial Notification was submitted on May 21, 2018, to correct some minor technical errors. An Initial Notification submittal to EPA for Boiler #6 shall be due no later than 120 days after the source becomes subject to the standard. [40 C.F.R. § 63.11225(a)(2)]

(2) Startup and Shutdown

Irving shall minimize the startup and shutdown periods for Boiler #6 and conduct startups and shutdowns for Boiler #6 according to the manufacturer's recommended procedures. If the manufacturer's recommended procedures are not available, Irving shall follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. [40 C.F.R. § 63.11201(b)]

(3) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

(ii) The initial tune-up for Boilers #4 and #5 was required to be performed by March 21, 2014, or within 30 days after startup of the boiler, whichever is later. Irving conducted the initial tune-ups on Boilers #4 and #5 on October 27 and 28, 2014. [40 C.F.R. §§ 63.11196(a)(1) and 63.11210(k)(2)]

(iii) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. For Boilers #4 and #5, each tune-up is required once every two calendar years. Boiler #6 is a seasonal boiler; therefore, each tune-up is required once every five calendar years. [40 C.F.R. § 63.11223(a) and 40 C.F.R. Part 63, Subpart JJJJJJ, Table 2]

(iv) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for seasonal boilers. [40 C.F.R. § 63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for seasonal boilers. [40 C.F.R. § 63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]

6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]

(v) Tune-Up Report: A tune-up report shall be maintained on-site and, if requested, submitted to EPA. The report shall contain the following information [40 C.F.R. § 63.11223(b)(6)]:

1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
2. A description of any corrective actions taken as part of the tune-up of the boiler; and
3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(vi) After conducting the initial boiler tune-up for Boilers #4 and #5, a Notification of Compliance Status was required to be submitted to EPA. Irving submitted their Notification of Compliance Status to EPA on August 8, 2017. [40 C.F.R. §§ 63.11210(k)(2), 63.11214(b), and 63.11225(a)(4)]

(4) Compliance Report

A compliance report shall be prepared by March 1st every two years for Boilers #4 and #5 and every five years for Boiler #6 which covers the previous two or five calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in 40 C.F.R. §§ 63.11225(b)(1) and (2), including the following [40 C.F.R. § 63.11225(b)]:

(i) Company name and address;
(ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
(iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature; and
(iv) The following certifications, as applicable:

1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."

2. "No secondary materials that are solid waste were combusted in any affected unit."
3. "This facility complies with the requirement in 40 C.F.R. §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(5) Energy Assessment

A one-time energy assessment was required to be performed by a qualified energy assessor on Boilers #4 and #5. Irving conducted their one-time energy assessment on June 6, 2016, and had a comprehensive report generated on June 22, 2016. [40 C.F.R. § 63.11196(a)(3)]

A Notification of Compliance Status was required to be submitted to EPA after completion of the one-time energy assessment. Irving submitted their Notification of Compliance Status to EPA on August 8, 2017. [40 C.F.R. §§ 63.11225(a)(4) and 63.11214(c)

c. Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ, including the following [40 C.F.R. § 63.11225(c)]:

(1) Copies of notifications and reports with supporting compliance documentation;
(2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
(3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
(4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

3. Control Equipment

Boilers #4 and #5 each use multiclones for particulate matter control. The multiclones were both installed in 2014 and have expected capture efficiencies of 65-75% for PM and PM_{10}, and 45-50% for $PM_{2.5}$. Irving shall keep records documenting maintenance, malfunctions, and downtime of the multiclones.

Boiler #6 will be equipped with a multiclone for particulate matter control. The multiclone will be installed with the boiler in 2018 and will have expected capture efficiencies of 65-75% for PM and PM_{10}, and 45-50% for $PM_{2.5}$. Irving shall keep records documenting maintenance, malfunctions, and downtime of the multiclone.

4. Emission Limits and Streamlining

For Boilers #4 and #5, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standard(s)	Origin and Authority	Licensed Emission Limit(s)
PM	0.3 lb/MMBtu	06-096 C.M.R. ch. 103, § 2.B.(4)(a)	0.3 lb/MMBtu
	7.7 lb/hr	A-314-77-1-A (10/25/2013), BACT	7.7 lb/hr
PM_{10}	7.7 lb/hr	A-314-77-1-A (10/25/2013), BACT	7.7 lb/hr
$PM_{2.5}$	5.3 lb/hr	A-314-77-1-A (10/25/2013), BACT	5.3 lb/hr
SO_2	0.6 lb/hr	A-314-77-1-A (10/25/2013), BACT	0.6 lb/hr
NO_x	5.7 lb/hr	A-314-77-1-A (10/25/2013), BACT	5.7 lb/hr
CO	15.4 lb/hr	A-314-77-1-A (10/25/2013), BACT	15.4 lb/hr
VOC	0.4 lb/hr	A-314-77-1-A (10/25/2013), BACT	0.4 lb/hr

For Boiler #6, 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	0.30 lb/MMBtu	06-096 C.M.R. ch. 103, § 2.B.(4)(a)	0.125 lb/MMBtu*
	0.125 lb/MMBtu	A-314-77-3-A (11/6/2016), BACT	
	2.9 lb/hr	A-314-77-3-A (11/6/2016), BACT	2.9 lb/hr
PM_{10}	2.9 lb/hr	A-314-77-3-A (11/6/2016), BACT	2.9 lb/hr
$PM_{2.5}$	2.9 lb/hr	A-314-77-3-A (11/6/2016), BACT	2.9 lb/hr
SO_2	0.6 lb/hr	A-314-77-3-A (11/6/2016), BACT	0.6 lb/hr
NO_x	5.1 lb/hr	A-314-77-3-A (11/6/2016), BACT	5.1 lb/hr
CO	13.8 lb/hr	A-314-77-3-A (11/6/2016), BACT	13.8 lb/hr
VOC	0.4 lb/hr	A-314-77-3-A (11/6/2016), BACT	0.4 lb/hr

*Streamlining requested

Visible emissions from each boiler shall not exceed 20% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time the unit operator may elect to comply with the following work practice requirements:

a. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all startups, shutdowns, and malfunctions of Boilers #4, #5, and #6 or their associated air pollution control equipment;
b. The unit operator shall develop and implement a written startup and shutdown plan;
c. The duration of unit startups and shutdowns shall each not exceed eight hours unless otherwise defined and provided for in the facility's air emission license; and
d. The unit, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

[06-096 C.M.R. ch. 140, BPT]

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boilers #4, #5, and #6 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 Limits	Compliance Methods	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	As requested
	lb/hr		
PM_{10}	lb/hr	EPA Test Method 201 or 201A	As requested
$PM_{2.5}$	lb/hr	EPA Test Method 201A	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested

Pollutant	Applicable Emission Limits	Compliance Methods	Frequency
Visible Emissions	20% opacity on a six-minute block average basis, except for startups, shutdowns, and malfunctions complying with the identified work practice standards	40 C.F.R. Part 60, App. A, Method 9	As requested

6. Periodic Monitoring

Irving shall monitor and record values and maintain records for Boilers #4, #5, and #6 and their associated air pollution control equipment as indicated in the following tables whenever the equipment is operating.

Boilers #4 and #5			
Monitored Value	Units of Measure	Monitoring Tool/Method	Frequency
Biomass fuel use	Tons	Steam production*	Monthly and 12-month rolling total
Biomass moisture content	Percent, by weight	Fuel sampling	Monthly
Estimated Amount of spilled distillate fuel fired	Gallons	One drum of material equals 55 gallons of distillate fuel	Monthly and 12-month rolling total
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier	As fuel is purchased
Operating time	Hours	Boiler control system (DCS)	Monthly and calendar year total
Steam production	Pounds per hour	Steam flow meter	Continuously
Steam temperature	Degrees Fahrenheit	Thermocouple	Continuously

*Based on using conversion ratios to convert from lb/hr steam output to Btu/hr steam output, then using the efficiency of the boiler and the heating value of the fuel (determined by the moisture content) to calculate biomass input in tons.

Boiler #6			
Monitored Value	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Biomass fuel use	Tons	Steam production*	Monthly and 12-month rolling total
Biomass moisture content	Percent, by weight	Fuel sampling	Monthly
Operating time	Hours	Boiler control system (DCS)	Monthly and 12-month rolling total
Steam production	Pounds per hour	Steam flow meter	Continuously
Steam temperature	Degrees Fahrenheit	Thermocouple	Continuously

*Based on using conversion ratios to convert from lb/hr steam output to Btu/hr steam output, then using the efficiency of the boiler and the heating value of the fuel (determined by the moisture content) to calculate biomass input in tons.

Multiclones on Boilers #4, #5, and #6		
Records Maintained	**Monitoring Tool/Method**	**Frequency**
Documentation of maintenance, malfunctions, and downtime of the multiclones	Logbook or electronic log	As each situation occurs

J. Sawmill and Planer Mill Operations

Sawmill and Planer Mill processes include debarking, sawing, hogging, chipping, trimming, planing, and sorting. Particulate matter and VOC producing activities are enclosed in the Sawmill building. Particulate matter emissions from the sawing, trimming, and Planer Mill operations are collected by a pneumatic conveying system that utilizes cyclones to capture particulate matter in the system's exhaust.

VOC emissions from Sawmill operations occur during the lumber sorting process. In order to determine which pieces of lumber are spruce and which are fir, Irving sprays each piece of lumber with an alcohol-based liquid that changes color based on the specific species of tree. Irving currently uses SAPTEK 200 for this task. VOC emissions from lumber sorting are conservatively estimated to be 5.1 TPY based on usage data from calendar year 2017, the percentage of the product that is VOC, and the specific gravity of the product.

1. New Source Performance Standards (NSPS)

   The Sawmill and Planer Mill operations have no applicable NSPS requirements.

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

   The Sawmill and Planer Mill operations have no applicable NESHAP requirements.

3. Control Equipment

   Particulate matter emissions from the Sawmill and Planer Mill operations are controlled by a pneumatic conveyance system and separate cyclones (Planer Mill cyclone and Sawmill cyclone).

4. Emission and Throughput Limits

   Visible emissions from the Sawmill and Planer Mill cyclones shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 140, BPT]

   VOC emissions from the Sawmill shall not exceed 10.2 TPY on a 12-month rolling total basis. Irving shall demonstrate compliance with this limit by limiting their use of SAPTEK 200 to no more than 3,080 gal/yr on a 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT]

5. Opacity Limit Compliance

   Compliance with the above opacity limit 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	20% opacity on a six-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

6. Periodic Monitoring

   Irving shall keep records documenting maintenance, malfunctions, and downtime of the Planer Mill and Sawmill cyclones. [A-314-77-1-A (10/25/2013), BACT]

   To demonstrate compliance with the Sawmill VOC emissions limit, Irving shall maintain usage records for SAPTEK 200 and any other products applied to lumber to sort the lumber into specific wood species. These records shall include the type and amount of product used, the VOC content of the product, and the specific gravity of the product. These records shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT]

K. Lumber Drying Kilns

Irving has three Lumber Drying Kilns. Two of the Lumber Drying Kilns were relocated to Irving's Nashville Plantation facility from Georgetown, Prince Edward Island, Canada to replace the nine lumber kilns previously located at the facility. The addition of these two kilns was addressed in NSR License A-314-77-1-A (10/25/2013). An additional Lumber Drying Kiln was constructed at the facility in 2017 as part of an improvement project intended to allow Irving to increase its production of kiln-dried lumber. The addition of this kiln was addressed in NSR License A-314-77-3-A (11/6/2016).

In the Lumber Drying Kilns, green lumber is stacked in an insulated chamber and dried using air and indirect heat from steam. Water is removed to attain wood moisture contents below 20%. The three Lumber Drying Kilns produce up to 145 MMBF/yr of finished spruce and fir lumber.

1. New Source Performance Standards (NSPS)

   The Lumber Drying Kilns have no applicable NSPS requirements.

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

   The Lumber Drying Kilns have no applicable NESHAP requirements.

3. Control Equipment

   No control equipment is required for the Lumber Drying Kilns.

4. Emission and Throughput Limits and Compliance Methods

   VOC emissions from the Lumber Drying Kilns shall be limited to 93.0 TPY on a 12-month rolling total basis. This limit was derived from a maximum production of 145 MMBF/yr and a VOC emission factor for spruce and fir kiln drying of 1.283 lb VOC/1,000 board-feet (MBF) based on data from testing done at the University of Maine and records in *Estimated VOC Losses During the Drying of Five Northeastern Species* (R.W. Rice and L. Zibilske, 1999). [A-314-77-3-A (11/6/2016), BACT]

   Because Irving only dries spruce and fir lumber, compliance with the VOC emission limit of 93.0 TPY shall be demonstrated by compliance with a kiln throughput limit of 145 MMBF/yr on a 12-month rolling total basis. Compliance with this limit shall be demonstrated by records of kiln throughput kept on a monthly and 12-month rolling total basis. [A-314-77-3-A (11/6/2016), BACT & 06-096 C.M.R. ch. 140, BPT]

L. Material Handling and Storage

Material handling and storage at Irving consists of biomass handling, ash handling, and the Wood Yard. The biomass and ash handling systems handle the fuel for and ash produced by Boilers #4-6, and the Wood Yard handles log and lumber storage, loading, and unloading.

1. Biomass Handling

   Biomass for Boilers #4-6 is generated by Sawmill and Planer Mill operations on-site and may be brought on-site from other suppliers, as needed. Sawmill generated bark is screened prior to use. A covered conveyor delivers biomass fuel from the yard to the storage area to be deposited in covered bins which have the capacity to hold enough material for up to 72 hours of boiler operation. A paved, uncovered pad is used for overflow storage. Biomass is conveyed from the storage bins through a conveyor system to the boiler feed bins located outside the steam plant. The feed bins provide an even fuel distribution and prevent back draft.

2. Ash Handling

   The ash handling systems for the bottom ash from Boilers #4-6 consists of a covered main ash conveyor and a covered above-grade storage bin (covered roll-off container) located outside, adjacent to the boiler and fuel storage buildings. Bottom ash is collected from a number of points within the boilers using screw conveyors and is deposited onto the main conveyor. Fly ash is collected using the multiclone collectors, stored in a small ash hopper with a rotary air lock, and is discharged onto the main ash conveyor. The roll-off storage container is periodically transported off-site for disposal.

3. Wood Yard

   The Wood Yard consists of log and lumber storage, loading, and unloading. It is estimated that the Wood Yard can accommodate up to 175 MMBF of wood in various stages including rough green lumber, rough dry lumber, and finished dry lumber.

4. New Source Performance Standards (NSPS)

   The material handling and storage processes at Irving have no applicable NSPS requirements.

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

   The material handling and storage processes at Irving have no applicable NESHAP requirements.

6. Control Equipment

   There is no control equipment required for the material handling and storage processes at Irving.

7. Opacity Limit and Compliance Methods

   Visible emissions from the material handling and storage processes at Irving shall not exceed 20% opacity, except for no more than five minutes in any one-hour period, during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 140, BPT]

M. Fire Pump #1

Irving operates one fire pump, Fire Pump #1, as an emergency fire pump. Fire Pump #1 has an engine rated at 1.7 MMBtu/hr which fires distillate fuel at a rate of 12 gallons/hour. Fire Pump #1 was manufactured and installed in 1967 and is located in the Skerry Brook Fire Pump House.

1. New Source Performance Standards (NSPS)

   Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is not applicable to Fire Pump #1 since the unit was ordered before July 11, 2005, and manufactured before April 1, 2006.

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

   Fire Pump #1 is subject to *NESHAP for Stationary Reciprocating Internal Combustion Engines* 40 C.F.R. Part 63, Subpart ZZZZ. The unit is considered an existing, emergency stationary reciprocating internal combustion engines (RICE) at an area HAP source and is not subject to NSPS 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 Engine Designation and Operating Criteria

      Under Subpart ZZZZ, a stationary RICE is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for 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 more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, 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.

Fire Pump #1 shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as an existing emergency stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause this engine to not be considered an emergency engine and therefore subject to all applicable requirements for non-emergency engines.

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

(1) Operation and Maintenance Requirements

Unit Type	Operating Limitations
Compression ignition (distillate fuel) unit:	- 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.

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions, or Irving 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 C.F.R. §§ 63.6603(a) and 63.6625(e) and 40 C.F.R. Part 63, Subpart ZZZZ, Table 2d]

(2) Optional Oil Analysis Program
Irving has the option of utilizing an oil analysis program which complies with the requirements of 40 C.F.R. § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Irving 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 C.F.R. § 63.6625(i)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements
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. [40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ, Table 2d]

(5) Annual Time Limit for Maintenance and Testing
As an emergency engine, the unit shall be limited to 100 hrs/yr for maintenance checks and readiness testing. Up to 50 hrs/yr of the 100 hrs/yr may be used in non-emergency situations (this does not include peak shaving, 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). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping
Irving shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 63.6655(f)]

3. Control Equipment

There is no control equipment required for Fire Pump #1.

4. Emission Limits and Streamlining

For Fire Pump #1, 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	Origin and Authority	Licensed Emission Limit
PM	0.52 lb/hr	A-314-77-1-A (10/25/2013), BPT	0.52 lb/hr
PM_{10}	0.52 lb/hr	A-314-77-1-A (10/25/2013), BPT	0.52 lb/hr
SO_2	0.003 lb/hr (based on 0.0015% S limit, by weight)	A-314-77-1-A (10/25/2013), BPT	0.003 lb/hr
NO_X	7.36 lb/hr	A-314-77-1-A (10/25/2013), BPT	7.36 lb/hr
CO	1.59 lb/hr	A-314-77-1-A (10/25/2013), BPT	1.59 lb/hr
VOC	0.60 lb/hr	A-314-77-1-A (10/25/2013), BPT	0.60 lb/hr

Table Notes: % S = percent fuel sulfur, by weight

Visible emissions from Fire Pump #1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period to accommodate load changes. During periods of startup, the facility shall comply with the following work practice standards:

a. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all unit startups;
b. The unit shall be operated in accordance with the manufacturer's emission-related operating instructions;
c. The unit operator shall 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; and
d. The unit, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

[06-096 C.M.R. ch. 140, BPT]

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Fire Pump #1 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Periodic Monitoring

Irving shall monitor and record values and maintain records for Fire Pump #1 as indicated in the following table whenever the equipment is operating.

Monitored Value	Units of Measure	Monitoring Tool/Method	Frequency
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier	As fuel delivery receipts are obtained
Operating time	Hours	Hour Meter	Monthly and 12-month rolling total
Type of Operation (emergency, maintenance, etc.)	N/A	Recorded electronically or in logbook	As it occurs

N. General Process Emissions

Visible emissions from any general process source not specifically addressed in this Air Emission License shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 140, BPT]

O. Facility Annual Emissions

1. Total Annual Emissions

Irving is licensed for the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on a biomass fuel limit of 35,000 TPY (including sawdust, wood chips, and/or absorbent pads with 5,000 gal/yr of absorbed distillate fuel) for Boilers #4 and #5 combined, an annual fuel limit of 6,500 TPY of biomass for Boiler #6, 100 hrs/yr of operation for Fire Pump #1, and a throughput limit of 145 MMBF/yr for all three Lumber Drying Kilns combined:

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

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC
Boilers #4 and #5 (combined)	47.3	47.3	33.1	3.9	34.7	94.5	2.7
Boiler #6	3.7	3.7	3.7	0.7	6.4	17.6	0.5
Fire Pump #1	0.1	0.1	-	0.1	0.4	0.1	0.1
Lumber Drying Kilns	-	-	-	-	-	-	93.0
Sawmill	-	-	-	-	-	-	10.2
Total TPY	**51.1**	**51.1**	**36.8**	**4.7**	**41.5**	**112.2**	**106.5**

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

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 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, 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 (CO_2e).

The quantity of CO_2e emissions from this facility is less than 100,000 TPY, based on the following:

- the facility's fuel use and throughput limits and operating hour restriction;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting,* 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

III. AMBIENT AIR QUALITY ANALYSIS

Irving 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. The ambient air quality analysis was documented in NSR License A-314-77-1-A (10/25/2013). 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-314-70-F-R/A pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of 06-096 C.M.R. ch. 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 Irving pursuant to the Department's preconstruction permitting requirements 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 Order. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 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 of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

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 C.M.R. ch. 140]

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 140]

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 in an application dated June 29, 2015.

Permit Shield Table

Source	Citation	Description	Basis for Determination
Boilers #4-6	40 C.F.R. Part 63, Subpart DDDDD	NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Facility is not a major source of HAP
	06-096 C.M.R. ch. 117	Source Surveillance – Emissions Monitoring	All three units have a heat input capacity less than 100 MMBtu/hr
Facility	40 C.F.R. Part 64	Compliance Assurance Monitoring	None of the units at the facility meet all three Part 64 applicability criteria (emission limits, a control device to meet the limits, and pre-control emissions greater than 100 TPY)

[06-096 C.M.R. ch. 140]

(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 three 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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. § 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 C.M.R. ch. 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 C.M.R. ch. 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. § 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 140]

(8) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 C.F.R. Part 60 or other method approved or required by the Department;

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 C.M.R. ch. 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. § 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; and

C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 140]

SPECIFIC CONDITIONS

(14) **Boilers #4, #5, and #6**

A. Fuel

1. Total fuel use for Boilers #4 and #5 shall not exceed 35,000 TPY of biomass (50% moisture content with a heat content of 4,500 Btu/lb), or equivalent, based on a 12-month rolling total. [A-314-77-1-A (10/25/2013), BACT]

2. Total fuel use for Boiler #6 shall not exceed 6,500 TPY of biomass (50% moisture content with a heat content of 4,500 Btu/lb), or equivalent Btu input, on a 12-month rolling total basis. [A-314-77-3-A (11/6/2016), BACT]

3. Fuel use records for all three boilers shall be kept on a 50% moisture basis using the formula below, when necessary, to convert fuel use records to 50% moisture. Moisture content shall be measured once per month. [06-096 C.M.R. ch.140, BPT]

   Tons biomass at 50% = (Tons of biomass at M%) x [(100-M)/50]

   Where M = the actual moisture content of the biomass fired

4. Records of annual fuel use, calculated based on actual steam production or other method approved by the Department, shall be kept on a monthly and 12-month rolling total basis. [A-314-77-1-A (10/25/2013), BACT & A-314-77-3-A (11/6/2016), BACT]

5. Distillate Fuel Spill Material

   a. Irving may burn up to 5,000 gal/yr of distillate fuel-soaked sawdust, wood chips, and absorbent pad material resulting from on-site spills in Boilers #4 and #5, based on a 12-month rolling total. Distillate fuel spill clean-up material from facility related off-site maintenance and other associated activities shall also be allowed to be burned. [A-314-77-2-M (8/1/2014), BACT]

   b. Irving shall maintain records of the estimated annual firing of spilled distillate fuel in Boilers #4 and #5 on a monthly and 12-month rolling total basis. For recordkeeping purposes, one drum of absorbent pads shall be considered to be 55 gallons of distillate fuel spill product. Documentation shall also include a record of the spill origin. [A-314-77-2-M (8/1/2014), BACT]

B. Irving shall operate the multi-clones on Boilers #4, #5, and #6 at all times the boilers are in operation. Irving shall keep records documenting maintenance, malfunctions, and downtime of the multi-clones. [A-314-77-1-A (10/25/2013), BACT & A-314-77-3-A (11/6/2016), BACT]

C. Boilers #4 and #5 shall each exhaust through individual stacks with a stack height of at least 100 feet above ground level. [A-314-77-1-A (10/25/2013), BACT]

D. Boilers #4, #5, and #6 Emission Limits

1. Emissions from Boilers #4 and #5 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.3	A-314-77-1-A (10/25/2013), BACT

Pollutant	lb/hr	Origin and Authority
PM	7.7	A-314-77-1-A (10/25/2013), BACT
PM_{10}	7.7	
$PM_{2.5}$	5.3	
SO_2	0.6	
NO_X	5.7	
CO	15.4	
VOC	0.4	

2. Emissions from Boiler #6 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.125	A-314-77-3-A (11/6/2016), BACT

Pollutant	lb/hr	Origin and Authority
PM	2.9	A-314-77-3-A (11/6/2016), BACT
PM_{10}	2.9	
$PM_{2.5}$	2.9	
SO_2	0.6	
NO_X	5.1	
CO	13.8	
VOC	0.4	

E. Visible Emissions

Visible emissions from Boilers #4, #5, and #6 shall each not exceed 20% opacity on a six-minute block average basis, except for periods of startup, shutdown, and malfunction during which time the unit operator may elect to comply with the following work practice requirements:

1. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all startups, shutdowns, and malfunctions of Boilers #4, #5, and #6 or their associated air pollution control equipment;
2. The unit operator shall develop and implement a written startup and shutdown plan;
3. The duration of unit startups and shutdowns shall each not exceed eight hours unless otherwise defined and provided for in the facility's air emission license; and

4. The unit, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

[06-096 C.M.R. ch. 140, BPT]

F. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 C.M.R. ch. 140, BPT]:

Pollutant	Unit of Emission Standard	Compliance Method	Frequency
PM	lb/MMBtu and lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
PM_{10}	lb/hr	EPA Test Method 201 or 201A	As requested
$PM_{2.5}$	lb/hr	EPA Test Method 201A	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	20% opacity on a six-minute block average basis, except for startups, shutdowns, and malfunctions complying with the identified work practice standards	40 C.F.R. Part 60, App. A, Method 9	As requested

G. Periodic Monitoring

Irving shall monitor and record values and maintain records for Boilers #4, #5, and #6 and their associated air pollution control equipment as indicated in the following tables whenever the equipment is operating. [06-096 C.M.R. ch. 140, BPT]

Boilers #4 and #5			
Monitored Value	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Biomass fuel use	Tons	Steam production	Monthly and 12-month rolling total
Biomass moisture content	Percent, by weight	Fuel sampling	Monthly
Amount of spilled distillate fuel fired	Gallons	One drum of material equals 55 gallons of distillate fuel	Monthly and 12-month rolling total
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier	As fuel is purchased
Operating time	Hours	Boiler control system (DCS)	Monthly and calendar year total
Steam production	Pounds per hour	Steam flow meter	Continuously
Steam temperature	Degrees Fahrenheit	Thermocouple	Continuously

Boiler #6			
Monitored Value	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Biomass fuel use	Tons	Steam production	Monthly and 12-month rolling total
Biomass moisture content	Percent, by weight	Fuel sampling	Monthly
Operating time	Hours	Boiler control system (DCS)	Monthly and calendar year total
Steam production	Pounds per hour	Steam flow meter	Continuously
Steam temperature	Degrees Fahrenheit	Thermocouple	Continuously

Multiclones on Boilers #4, #5, and #6		
Records Maintained	**Monitoring Tool/Method**	**Frequency**
Documentation of maintenance, malfunctions, and downtime of the multiclones	Logbook or electronic log	As each situation occurs

H. 40 C.F.R. Part 60, Subpart Dc

Irving shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers #4, #5, and #6 including, but not limited to, the following:

1. Boilers #4 and #5

   Irving shall maintain records of the amount of each fuel combusted during each calendar month. [40 C.F.R. § 60.48c(g)(2)]

2. Boiler #6

   a. Irving shall submit notification to EPA and the Department of the dates of construction and actual start-up of Boiler #6. These notifications shall be postmarked no later than 30 days and 15 days after such dates, respectively. The notifications shall include the design heat input capacity of the boiler and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)]
   b. Irving shall maintain records of the amount of each fuel combusted in Boiler #6 during each calendar month. [40 C.F.R. § 60.48c(g)(2)]

I. 40 C.F.R. Part 63, Subpart JJJJJJ

Irving shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boilers #4, #5, and #6 including, but not limited to, the following:

1. General Compliance Requirement

   At all times Irving must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require Irving to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.11205(a)]

2. Compliance Dates, Notifications, and Work Practice Standards

a. Initial Notification of Compliance

An Initial Notification for Boiler #6 shall be submitted to EPA no later than 120 days after the source becomes subject to the standard. [40 C.F.R. § 63.11225(a)(2)]

b. Startup and Shutdown

Irving shall minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If the manufacturer's recommended procedures are not available, Irving shall follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. [40 C.F.R. § 63.11201(b)]

c. Boiler Tune-Up Program

(1) The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

(2) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. For Boilers #4 and #5, each tune-up is required once every two calendar years. Boiler #6 is a seasonal boiler; therefore, each tune-up is required once every five calendar years. [40 C.F.R. § 63.11223(a) and 40 C.F.R. Part 63, Subpart JJJJJJ, Table 2]

(3) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

(i) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for seasonal boilers. [40 C.F.R. § 63.11223(b)(1)]

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame patter, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for seasonal boilers. [40 C.F.R. § 63.11223(b)(3)]

(iv) Optimize total emissions of CO, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]

(v) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]

(vi) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]

(4) Tune-up Report: A tune-up report shall be maintained on-site and, if requested, submitted to EPA. The report shall contain the following information [40 C.F.R. § 63.11223(b)(6)]:

(i) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;

(ii) A description of any corrective actions taken as part of the tune-up of the boiler; and

(iii) The types and amounts of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

d. Compliance Report

A compliance report shall be prepared by March 1st every two year for Boilers #4 and #5 and every five years for Boiler #6 which covers the previous two or five calendar years. The report shall be maintained by the source and submitted to the Department and to EPA upon request. The report must include the items contained in 40 C.F.R. §§ 63.11225(b)(1) and (2), including the following [40 C.F.R. § 63.11225(b)]:

(1) Company name and address;

(2) A statement of whether the source has complied with all the relevant requirements of this Subpart;

(3) A statement certifying truth, accuracy, and completeness of the notification, signed by a responsible official and containing the official's name, title, phone number, email address, and signature; and
(4) The following certifications, as applicable:

(i) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of the boiler in accordance with the frequency specified in this Subpart."
(ii) "No secondary materials that are solid waste were combusted in any affected unit."
(iii)"This facility complies with the requirements in 40 C.F.R. §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

3. Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:

a. Copies of notifications and reports with supporting compliance documentation;
b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

(15) **Sawmill and Planer Mill Operations**

A. For each of the process cyclones exhausting to the atmosphere, visible emissions shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 140, BPT]

B. Irving shall keep records documenting maintenance, malfunctions, and downtime of the cyclones exhausting to the atmosphere. [A-314-77-1-A (10/25/2013), BACT]

C. VOC Emissions

1. VOC emissions from the Sawmill shall not exceed 10.2 TPY on a 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT]

2. To demonstrate compliance with the above limit, Irving shall limit the use of SAPTEK 200 to no more than 3,080 gal/yr based on a 12-month rolling total. Irving shall maintain usage records for SAPTEK 200 and any other products applied to lumber to sort the lumber into specific wood species. These records shall include the type and amount of product used, the VOC content of the product, and the specific gravity of the product. These records shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 140, BPT]

(16) **Lumber Drying Kilns**

Irving shall be limited to a throughput of 145 MMBF/yr (equivalent to 93.0 TPY of VOC) of spruce and fir lumber on a 12-month rolling total basis. Compliance with this limit shall be demonstrated by records of kiln throughput kept on a monthly and 12-month rolling total basis. [A-314-77-3-A (11/6/2016), BACT & 06-096 C.M.R. ch. 140, BPT]

(17) **Material Handling and Storage**

Visible emissions from a fugitive emission source (including material handling, stockpiles, and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period, during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one-hour period. [06-096 C.M.R. ch. 140, BPT]

(18) **Fire Pump #1**

A. Allowable Operation

1. Fire Pump #1 is licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT]
2. Fire Pump #1 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 140, BPT]

B. The distillate fuel sulfur content for Fire Pump #1 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [A-314-77-1-A (10/25/2013), BACT]

C. Emissions shall not exceed the following limits [A-314-77-1-A (10/25/2013), 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	0.52	0.52	0.003	7.36	1.59	0.60

D. Visible emissions from Fire Pump #1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period to accommodate load changes. During periods of startup, the facility shall comply with the following work practice standards:

1. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all unit startups;
2. The unit shall be operated in accordance with the manufacturer's emission-related operating instructions;
3. The unit operator shall 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; and
4. The unit, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but it not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

[06-096 C.M.R. ch. 140, BPT]

E. Compliance Methods

Compliance with the emission limits associated with Fire Pump #1 shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [06-096 C.M.R. ch. 140, BPT]

F. Periodic Monitoring

Irving shall monitor and record values and maintain records for Fire Pump #1 as indicated in the following table whenever the equipment is operating. [06-096 C.M.R. ch. 140, BPT]

Monitored Value	Units of Measure	Monitoring Tool/Method	Frequency
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier	As fuel delivery receipts are obtained
Operating time	Hours	Hour Meter	Monthly and 12-month rolling total
Type of Operation (emergency, maintenance, etc.)	N/A	Recorded electronically or in logbook	As it occurs

G. Fire Pump #1 shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ including, but not limited to, the following:

1. Irving shall meet the following operational limitations for Fire Pump #1:

   a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
   b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
   c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

   Records shall be maintained documenting compliance with the operational limitations.

   [40 C.F.R. §§ 63.6603(a) and 63.6625(e), 40 C.F.R. Part 63, Subpart ZZZZ, Table 2d, and 06-096 C.M.R. ch. 140, BPT]

2. Oil Analysis Program Option
   Irving has the option of utilizing an oil analysis program which complies with the requirements of 40 C.F.R. § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Irving 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 C.F.R. § 63.6625(i)]

3. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 63.6625(f)]

4. Maintenance, Testing, and Non-Emergency Operating Situations

   a. The engine shall be limited to 100 hrs/yr for maintenance checks and readiness testing. Up to 50 hrs/yr of the 100 hrs/yr may be used in non-emergency situations (this does not include peak shaving, 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). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 140, BPT]

   b. Irving shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

5. Operation and Maintenance
   The engine shall be operated and maintained according to the manufacturer's emission-related written instructions, or Irving 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 C.F.R. § 63.6625(e)]

6. Startup Idle and Startup Time Minimization
   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. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ, Table 2d]

(19) **General Process Sources**

Visible emissions from any general process source not specifically covered under a separate condition shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 140, BPT]

(20) **Semiannual Reporting** [06-096 C.M.R. ch. 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 Department within seven calendar days of the due date.
C. Each semiannual report shall include a summary of the periodic 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.

(21) **Annual Compliance Certification**

Irving 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 31st 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 C.M.R. ch. 140]

(22) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, the licensee shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted by the date specified in 06-096 C.M.R. ch. 137.

(23) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

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

(24) **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 C.F.R. 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 C.F.R. Part 82, Subpart F]

(25) **Asbestos Abatement**

When undertaking Asbestos abatement activities, Irving shall comply with the *Standard for Asbestos Demolition and Renovation,* 40 C.F.R. Part 61, Subpart M.

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

A. Irving shall submit a complete Part 70 renewal application at least six but no more than 18 months prior to the expiration of this air license.

B. Pursuant to Title 5 M.R.S. § 10002, and 06-096 C.M.R. ch. 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 C.M.R. ch. 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**

(27) **New Source Review**

Irving is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emission license, and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emissions License, A-314-70-F-R/A, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 21 DAY OF August , 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PAUL MERCER, 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 six but no more than 18 months prior to expiration of the facility's Part 70 license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the Part 70 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: July 10, 2015
Date of application acceptance: July 10, 2015

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

Filed
AUG 21 2018
State of Maine
Board of Environmental Protection