

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

DEPARTMENT ORDER

Irving Forest Products, Inc. Aroostook County Nashville Plantation, Maine A-314-77-9-A Departmental
Findings of Fact and Order
New Source Review
NSR #9

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

| FACILITY | Irving Forest Products, Inc. |
|--------------------|---|
| LICENSE TYPE | 06-096 C.M.R. ch. 115, Minor Modification |
| | 321912 (Cut Stock, Resawing Lumber, and Planing) |
| NAICS CODES | 321113 (Sawmills) |
| | 321999 (All Other Misc. Wood Product Manufacturing) |
| NATURE OF BUSINESS | Wood Products |
| FACILITY LOCATION | 1218 Portage Road, Nashville Plantation, Maine |

B. NSR License Description

Irving Forest Products, Inc. (IFP) has requested a New Source Review (NSR) license to address the installation of a 20,000-gallon distillate storage tank.

C. Emission Equipment

The following equipment is addressed in this NSR license:

Bulk Petroleum Storage Tanks

| Tank Number | Capacity (gallons) | Product Stored | Tank Type | Install Date |
|----------------|--------------------|-------------------|-----------|-----------------|
| Tank 11 | 20,000 | distillate fuel | Fixed | 2019 |

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D. Definitions

<u>Distillate Fuel</u> 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.

<u>Records</u> or <u>Logs</u> mean either hardcopy or electronic records.

E. Project Description

In 2019, IFP installed a new 20,000-gallon, aboveground, petroleum storage tank for the purposes of storing distillate fuel (diesel) to be used for refueling of mobile and non-road equipment at the facility.

F. Application Classification

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

The application for IFP does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements.

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

1. Baseline Actual Emissions

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

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

2. Projected Actual Emissions

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

Projected Actual Emissions

| Equipment | PM (tpy) | PM ₁₀ (tpy) | PM _{2.5} (tpy) | SO ₂ (tpy) | NO _x (tpy) | CO (tpy) | VOC (tpy) |
|-----------|-------------|------------------------|-------------------------|-----------------------|-----------------------|-------------|--------------|
| Tank 11 | | - | _ | - | - | - | < 0.1 |
| Total | _ | _ | _ | _ | _ | _ | <0.1 |

3. Emissions Increases

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

| Pollutant | Baseline Actual Emissions (ton/year) | Projected Actual Emissions Emissions Increase (ton/year) (ton/year) | | Significant Emissions Increase Levels (ton/year) |
|-----------------|--|---|------------|---|
| PM | (ton/year) | | (ton/year) | 25 |
| PM_{10} | 0 | 0 | 0 | 15 |
| $PM_{2.5}$ | 0 | 0 | 0 | 10 |
| SO ₂ | 0 | 0 | 0 | 40 |
| NO_{x} | 0 | 0 | 0 | 40 |
| CO | 0 | 0 | 0 | 100 |
| VOC | 0 | < 0.1 | < 0.1 | 40 |

4. Classification

Since emissions increases do not exceed significant emissions increase levels, this NSR license is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

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

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The requirements of this NSR license will be incorporated into IFP's Part 70 air emission license concurrent with the pending Part 70 license renewal.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. Tank 11

Tank 11 is a 20,000-gallon, aboveground, fixed-roof, petroleum storage tank which stores distillate fuel. The distillate fuel stored in the tank is used to refuel mobile and non-road equipment at the facility.

IFP estimated uncontrolled potential emissions of VOC from Tank 11 to be less than 0.1 tpy based on use of the Environmental Protection Agency's (EPA's) TANKS 5.0 model. This model calculates emissions based on emission factors and formulas contained in *Compilation of Air Emissions Factors from Stationary Sources*, AP-42, Volume I, Chapter 7. No other criteria pollutants are expected to be emitted from this tank.

1. BACT Findings

IFP submitted a BACT analysis for control of emissions of VOC from Tank 11. IFP considered several control strategies including thermal oxidation, adsorption, and condensation. In addition, the Department also considered the use of an internal floating roof. However, all control strategies considered were determined to be economically infeasible due to the low level of potential emissions to be controlled.

The Department determines that BACT for Tank 11 to be the following requirements.

IFP shall limit the product stored in Tank 11 to only distillate fuel (as defined by this license).

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IFP shall maintain the necessary records to calculate emissions from Tank 11 in accordance with the procedures in AP-42 or other alternative method approved by the Department. Calculations of emissions from Tank 11 shall be performed at least once annually and included in the annual emissions statement submitted pursuant to *Emission Statements*, 06-096 C.M.R. ch. 137. Additional calculations of emissions from any continuous 12-month period shall be performed upon request by the Department.

2. 06-096 C.M.R. ch. 111

Tank 11 is not subject to the requirements of *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111, because it has a capacity less than 39,000 gallons and stores a product with a vapor pressure less than 10.5 kilopascals.

3. 06-096 C.M.R. ch. 118

Tank 11 is not subject to the requirements of *Gasoline Dispensing Facilities Vapor Control*, 06-096 C.M.R. ch. 118, because it does not store gasoline.

4. 06-096 C.M.R. ch. 133

Tank 11 is not subject to the requirements of *Petroleum Liquids Transfer Vapor Recovery at Bulk Gasoline Plants*, 06-096 C.M.R. ch. 133, because IFP is not a bulk gasoline plant and Tank 11 does not store gasoline.

5. 06-096 C.M.R. ch. 170

Tank 11 is not subject to the requirements of *Degassing of Petroleum Storage Tanks*, *Marine Vessels*, and *Transport Vessels*, 06-096 C.M.R. ch. 170, because it has a capacity of less than 39,000 gallons and is not a transport vessel or marine vessel.

6. 06-096 C.M.R. ch. 171

Tank 11 is not subject to the requirements of *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171, because it has a capacity of less than 39,000 gallons and IFP is not a petroleum storage facility as defined by the rule.

7. 40 C.F.R. Part 60, Subpart Kb

Tank 11 is not subject to the requirements of Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984, and On or Before October 4, 2023, 40 C.F.R. Part 60, Subpart Kb, because the true

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vapor pressure of the product stored is less than 15.0 kilopascals. [40 C.F.R. § 60.110b(b)]

8. 40 C.F.R. Part 60, Subpart Kc

Tank 11 is not subject to the requirements of Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After October 4, 2023, 40 C.F.R. Part 60, Subpart Kc.

Tank 11 was installed prior to October 15, 2024. Existing storage vessels can become subject to Subpart Kc if modified. Pursuant to 40 C.F.R. § 60.110c(e), a modification occurs if the storage vessel is used to store a volatile organic liquid (VOL) that has a greater maximum true vapor pressure than all VOL historically stored or permitted to be stored. Tank 11 has historically stored distillate fuel and is limited to only storing distillate fuel. Therefore, Tank 11 is not subject to Subpart Kc provided it continues to store the products for which it is currently licensed. IFP shall maintain records of the type and maximum true vapor pressure for each product stored in Tank 11.

C. Incorporation Into the Part 70 Air Emission License

Pursuant to *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140 § 1(C)(8), for a modification at the facility that has undergone NSR requirements or been processed through 06-096 C.M.R. ch. 115, the source must apply for an amendment to their Part 70 license within one year of commencing the proposed operations, as provided in 40 C.F.R. Part 70.5. IFP has requested that the requirements of this NSR license be incorporated into the pending Part 70 air emission license renewal.

D. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- A biomass fuel limit of 37,450 tons/year (including sawdust, wood chips, and/or absorbent pads with up to 5,000 gal/year of absorbed distillate fuel) for Boilers #4 and #5 combined;
- A distillate fuel limit of 250,000 gal/year for Boiler #7;
- 100 hours/year of operation for Fire Pump #1;
- A throughput limit of 145 MMBF/year for the four Lumber Drying Kilns combined;
- 8,760 hours/year of operation for the CEC Screen Engine; and

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• Storing only distillate fuel in Tank 11.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license, previously issued NSR licenses, and the facility's Part 70 license and amendments to that license.

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) | 50.6 | 53.4 | 35.4 | 4.2 | 37.1 | 101.1 | 2.9 |
| Boiler #7 | 1.4 | 1.4 | 0.2 | 0.1 | 1.9 | 0.5 | 0.1 |
| Fire Pump #1 | 0.1 | 0.1 | _ | 0.1 | 0.4 | 0.1 | 0.1 |
| Lumber Drying Kilns | _ | _ | _ | _ | _ | _ | 93.0 |
| CEC Screen Engine | 0.3 | 0.3 | _ | 0.1 | 12.2 | 2.6 | 1.0 |
| Tank 11 | _ | _ | _ | ĺ | _ | _ | 0.1 |
| Total TPY | 52.4 | 55.2 | 35.6 | 4.5 | 51.6 | 104.3 | 97.2 |

| Pollutant | Tons/year |
|------------|-----------|
| Single HAP | 9.9 |
| Total HAP | 24.9 |

ORDER

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

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

The Department hereby grants New Source Review License A-314-77-9-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the specific conditions below.

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

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SPECIFIC CONDITIONS

Tank 11 (1)

- A. Tank 11 shall store only distillate fuel. IFP shall maintain records of the type and maximum true vapor pressure for each product stored in Tank 11. [06-096 C.M.R. ch. 115, BACT]
- B. IFP shall maintain the necessary records to calculate emissions from Tank 11 in accordance with the procedures in AP-42 or other alternative method approved by the Department. Calculations of emissions from Tank 11 shall be performed at least once annually and included in the annual emissions statement submitted pursuant to Emission Statements, 06-096 C.M.R. ch. 137. Additional calculations of emissions from any continuous 12-month period shall be performed upon request by the Department.

[06-096 C.M.R. ch. 115, BACT]

(2) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, IFP may be required to submit additional information. Upon written request from the Department, IFP shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter. [06-096 C.M.R. ch. 115, § 2(O)]

| Done and dated in augusta, maine this 26^{th} day of FEBRUARY, 2025 . |
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| DEPARTMENT OF ENVIRONMENTAL PROTECTION |
| |
| BY: for |
| MELANIE LOYZIM, COMMISSIONER |
| PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES |
| Date of initial receipt of application: 9/23/2024 |
| Date of application acceptance: 9/23/2024 |
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This Order prepared by Lynn Muzzey, Bureau of Air Quality.