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

DEPARTMENT ORDER

Backyard Farms, LLC **Somerset County** **Madison, Maine** **A-937-71-P-A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Amendment #1**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Backyard Farms, LLC (BYF) was issued Air Emission License A-937-71-O-R on January 3, 2018, for the operation of emission sources associated with their greenhouse facility.

The equipment addressed in this license amendment is located at 131 River Road, Madison, Maine.

BYF has requested an amendment to their license in order to install a fourth boiler to be used as either a backup or during peak demand. As part of this amendment, the Department is also updating applicable requirements from *Visible Emission Regulation*, 06-096 C.M.R. ch. 101, which has been revised with an effective date of January 1, 2024.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

Boiler

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #P4	34.12	33,452.4 scf/hr	Natural Gas	2021	2025	9
		377 gal/hr	Liquified Petroleum Gas			

The following equipment is addressed in this air emission license amendment only for the purpose of updating *Visible Emission Regulation*, C.M.R. ch. 101:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #P1	47.7 [each]	527 gal/hr	LPG	2006	2006	1
Boiler #P2		46,765 scf/hr	Natural Gas			2
Boiler #P3		341 gal/hr	Distillate Fuel	2009	2009	3

C. Definitions

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.

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

D. Application Classification

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

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emissions" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (tpy)	Future License (tpy)	Net Change (tpy)	Significant Emissions Levels
PM	22.1	22.1	-	100
PM_{10}	22.1	22.1	-	100
$PM_{2.5}$	22.1	22.1	-	100
SO_2	0.5	0.5	-	100
NO_x	83.4	83.4	-	100
CO	22.8	22.8	-	100
VOC	1.6	1.6	-	100

This modification is determined to be a minor modification and has been processed as such.

E. Facility Classification

With the annual heat input limit on Boilers #P1, #P2. #P3, and #P4 and Vaporizers #1 and #2 and the operating hours restriction on the emergency generators, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because BYF is subject to license restrictions that keep facility emissions below major source thresholds for NO_x; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

Emissions of NO_x are licensed above 80% of the major source threshold. Therefore, this facility is classified as an "80% Synthetic Minor" for the purpose of determining the minimum required compliance inspection frequency in accordance with Maine's Compliance Monitoring Strategy.

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.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 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. Boiler #P4

Boiler #P4 was selected to provide backup heat to the facility. The boiler is rated at 34.12 MMBtu/hr and fires natural gas and propane. The boiler is a packaged, fire-tube unit manufactured by F&H Crone, a Dutch manufacturer. The boiler is planned to be installed in 2025 and will exhaust through its own stack, Stack #9. BYF has an overall heat input limit of 550,000 MMBtu per year, which applies to three existing boilers and two vaporizers. This boiler would also be subject under the same combined heat input limit.

1. BACT Findings

BYF submitted a BACT analysis for control of emissions from Boiler #P4.

a. Particulate Matter (PM, PM_{10}, $PM_{2.5}$)
BYF has proposed to burn only low-ash content fuels (propane and natural gas) in the boiler.

BACT for $PM/PM_{10}/PM_{2.5}$ emissions from Boiler #P4 is the firing of natural gas or propane and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)
BYF has proposed to fire only propane and natural gas. The use of these fuels results in minimal emissions of SO_2.

BYF considered several control strategies for the control of SO_2 including dry sorbent injection, wet scrubbing systems, and spray dryer adsorbers. The use of each technology would not be cost effective for the amount of SO_2 to be controlled.

BACT for SO_2 emissions from Boiler #P4 is the use of propane and natural gas and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)
BYF considered several control strategies for the control of NO_x including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), flue gas recirculation (FGR), and low-NO_x burners.

SNCR requires furnace space and residence time not available with the package boiler proposed and therefore is not technically feasible. Capital costs of adding an SCR to this package boiler are expected to be well over $200,000 with potential annual emissions of 5.5 tons would make it economically infeasible.

FGR can attain NO_x reduction efficiencies through lowering burner flame temperature and thereby reducing thermal NO_x formation. Potential challenges with FGR include additional electricity requirements, expense of modifying a package boiler, and modified levels of CO_2 in the flue gas. A portion of the flue gas is proposed to be used in greenhouse operations, so this modification could lead to a negative impact on greenhouse operations by altering the expected CO_2 levels. Similar to SCR, the NO_x reduction after installing low-NO_x burners would be minimal and would incur additional expense of continued electricity requirements and the initial expense of package boiler modification. For those reasons, FGR is considered economically infeasible.

The use of low-NO_x burners on Boiler #P4 has been determined to be feasible and has been selected as part of the BACT strategy. The burner supplier has provided an emission rate of 0.0365 lb/MMBtu or 30 ppmdv corrected to 3% oxygen.

BACT for NO_x emissions from Boiler #P4 is the use of low-NO_x burners and the emission limits listed in the tables below.

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

BYF stated that the CO and VOC emission factors from modern propane and natural gas are essentially negligible and proposes using proven Dutch burner technology to meet BACT. The Dutch burner system adjusts the gas flowrate to minimize (reported as 0.00 lb/hr from the manufacturer's testing data) emissions of CO. By ensuring complete combustion, VOC emissions are also minimized. BYF also proposes using the emission factors from the existing boilers, which are lower than EPA's AP-42 values.

BACT for CO and VOC emissions from Boiler #P4 is the emission limits listed in the tables below.

e. Emission Limits

The BACT emission limits for Boiler #P4 were based on the following:

Natural Gas

$PM/PM_{10}/PM_{2.5}$	–	0.01 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
SO_2	–	0.0006 lb/MMBtu based on AP-42, Table 1.4-2, dated 7/98
NO_x	–	0.098 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
CO	–	0.082 lb/MMBtu based on AP-42, Table 1.4-2, dated 7/98
VOC	–	0.005 lb/MMBtu based on AP-42, Table 1.4-2, dated 7/98
Visible Emissions	–	06-096 C.M.R. ch. 101

Propane

$PM/PM_{10}/PM_{2.5}$	–	0.007 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
SO_2	–	0.0003 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
NO_x	–	0.091 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
CO	–	0.035 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
VOC	–	0.003 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
Visible Emissions	–	06-096 C.M.R. ch. 101

The BACT emission limits for Boiler #P4 are the following:

Unit	Pollutant	Fuel Type	lb/MMBtu
Boiler #P4	PM	Natural Gas	0.01
		Propane	0.007

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #P4 *Natural Gas*	0.34	0.34	0.34	0.02	3.34	2.80	0.17
Boiler #P4 *Propane*	0.24	0.24	0.24	0.01	3.10	1.19	0.10

2. Visible Emissions

   Visible emissions from Boiler #P4 shall not exceed 10% opacity on a six-minute block average basis.

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

   Due to the size and year of manufacture, Boiler #P4 is subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

   BYF shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #P4 including, but not limited to, the following:

   a. Notifications
      BYF shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up. This notification 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. Reporting and Recordkeeping

      (1) BYF shall maintain records of the amounts of each fuel combusted during each month and records of fuel receipts with fuel certifications. [40 C.F.R. § 60.48c(g)]

      (2) 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

      (3) BYF shall maintain records required by Subpart Dc for a period of two years following the date of the record. [40 C.F.R. § 60.48c(i)] Note: Standard

Condition (8) of this license requires all records be retained for six years; therefore, the two-year record retention requirement of Subpart Dc is satisfied by compliance with the more stringent six-year requirement.

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

   Boiler #P4 is not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ. Natural gas-fired and propane-fired units are exempt from the requirements of this regulation. [40 C.F.R. §§ 63.11195(e)]

C. C.M.R. Chapter Updates and Clarifications

Requirements in this license have been updated to include current requirements for Boilers #P1, #P2, and #P3 and fugitive emissions based on *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 and to clarify the requirements of *Emission Statements*, 06-096 C.M.R. ch. 137. Specific Conditions have been updated to reflect the current rules.

1. Boilers #P1, #P2, and #P3 Visible Emissions

   a. When firing distillate fuel, visible emissions from Boilers #P1, #P2, and #P3 (each) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2)]
   b. When firing propane (LPG) or natural gas, visible emissions from Boilers #P1, #P2, and #P3 (each) shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

2. Fugitive Emissions

   BYF shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

   BYF shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

3. Emission Statements

BYF is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. BYF shall maintain the following records in order to comply with this rule:

a. The amount of distillate fuel fired in Boilers #P1, #P2, and #P3 and Generators #1 and #2 (each) on a monthly basis;
b. The sulfur content of the distillate fuel fired in Boilers #P1, #P2, and #P3 and Generators #1 and #2;
c. The amount of propane (LPG) fired in Boilers #P1, #P2, #P3, and #P4; Vaporizers #1 and #2; and Generator #3; and
d. The amount of natural gas fired in Boilers #P1, #P2, #P3, and #P4.

Every third year, or as requested by the Department, BYF shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. BYF shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).
[38 M.R.S. § 353-A(1-A)]

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:

- A heat input limit of 550,000 MMBtu/year for Boilers #P1, #P2, #P3, and #P4 and Vaporizers #1 and #2, combined; and
- Operation of Generators #1, #2, and #3 for 100 hours/year each for non-emergency use.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC
Boilers #P1, #P2, #P3, and #P4 and Vaporizers #1 and #2	22.0	22.0	22.0	0.4	82.5	22.7	1.5
Generators #1, #2, and #3	0.1	0.1	0.1	0.1	0.9	0.1	0.1
Total TPY	**22.1**	**22.1**	**22.1**	**0.5**	**83.4**	**22.8**	**1.6**

Pollutant	Tons/year
Single HAP	7.9
Total HAP	19.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by-case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM_{10}	25
$PM_{2.5}$	15
SO_2	50
NO_x	50
CO	250

The proposed total annual licensed emissions for NO_x are above the emission levels contained in the table above. The maximum licensed NO_x emission level for the facility was established in Air Emission License Amendment A-937-71-K-A (issued August 16, 2012) at 88.0 tons per year. At the time that license amendment was issued, the modeling threshold for NO_x emissions was still 100 tons per year as established in the version of 06-096 C.M.R. ch. 115 amended August 4, 2008, in effect at the time. Approximately four months after issuance of that amendment, on Dec 1, 2012, 06-096 C.M.R. ch. 115 was further amended, part of which included decreasing the modeling threshold for NO_x emissions from 100 to 50 tons per year. Since the decrease in the NO_x modeling threshold, the facility's total annual licensed NO_x emissions have decreased from 88.0 tons per year to 83.4 tons per year.

After taking into consideration the above information and the following factors:

- similarity with other licensed sources based on size, emissions, and local topography;
- location, including proximity to other sources, complex terrain and Class I areas; and
- background air quality data available in or representative of the local area,

the Department has determined that an ambient air quality impact analysis is not required for the facility at this time and that Ambient Air Quality Standards (AAQS) will not be exceeded.

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

ORDER

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

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

The Department hereby grants Air Emission License Amendment A-937-71-P-A subject to the conditions found in Air Emission License A-937-71-O-R and the following conditions.

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

SPECIFIC CONDITIONS

The following shall replace Conditions (16), (17), (20), and (22) of Air Emission License A-937-71-O-R:

(16) **Boilers #P1, #P2, #P3, and #P4 and Vaporizers #1 and #2 Heat Input Limit**

A. Boilers #P1, #P2, #P3, and #P4 and Vaporizers #1 and #2 combined shall be limited to a maximum heat input of 550,000 MMBtu/year based on a 12-month rolling total for distillate fuel, propane (LPG), and natural gas use, combined. [06-096 C.M.R. ch. 115, BPT]

B. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Fuel use shall be converted to heat input on a monthly and 12-month rolling total basis using heating values of 0.14 MMBtu/gal for distillate fuel, 0.0905 MMBtu/gal for propane (LPG), and 0.00102 MMBtu/scf for natural gas. [06-096 C.M.R. ch. 115, BPT]

(17) **Boilers #P1, #P2, #P3, and #P4**

A. Fuel

1. Boilers #P1, #P2, and #P3 are all licensed to fire distillate fuel with a maximum sulfur content of 0.0015% by weight (15 ppm), LPG (propane), and natural gas. [06-096 C.M.R. ch. 115, BPT]
2. Boiler #P4 is licensed to fire propane (LPG) and natural gas. [06-096 C.M.R. ch. 115, BACT]
3. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
4. Compliance shall be demonstrated by fuel records showing the quantity, type, and percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, fuel supplier certification, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Fuel	Pollutant	lb/MMBtu	Origin and Authority
Boilers #P1, #P2, and #P3 [each]	Distillate Fuel	PM	0.08	A-937-71-G-M (10/7/09), BACT
Boilers #P1, #P2, #P3, and #P4 [each]	Propane (LPG)	PM	0.007	06-096 C.M.R. ch. 115, BACT (established in A-937-71-H-M (10/14/10) for boilers #P1, #P2, and #P3)
	Natural Gas	PM	0.01	

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

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boilers #P1, #P2, and #P3 [each] *Distillate Fuel*	3.82	3.82	3.82	0.07	14.31	1.7	0.07
Boilers #P1, #P2, and #P3 [each] *Propane (LPG)*	0.33	0.33	0.33	0.01	4.35	1.69	0.15
Boilers #P1, #P2, and #P3 [each] *Natural Gas*	0.48	0.48	0.48	0.03	4.68	3.93	0.26
Boiler #P4 *Natural Gas*	0.34	0.34	0.34	0.02	3.34	2.80	0.17
Boiler #P4 *Propane*	0.24	0.24	0.24	0.01	3.10	1.19	0.10

D. When firing distillate fuel, visible emissions from Boilers #P1, #P2, and #P3 (each) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2)]

E. When firing propane (LPG) or natural gas, visible emissions from Boilers #P1, #P2, #P3, and #P4 (each) shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

F. BYF shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers #P1, #P2, #P3, and #P4 including, but not limited to, the following:

1. Notification

   BYF shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up of Boiler #P4. This notification 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. Standards

   a. Sulfur Dioxide (SO_2)
   The distillate fuel fired in Boilers #P1, #P2, and #P3 shall not exceed 0.5% sulfur by weight. [40 C.F.R. § 60.42c(d)] This fuel sulfur content limit has been streamlined to the lower limit (0.0015% by weight) required under 06-096 C.M.R. ch. 115, BPT.

   b. Opacity
   When firing distillate fuel, visible emissions from Boilers #P1, #P2, and #P3 (each) shall each not exceed 20% opacity on a six-minute block average, except for one six-minute block average per hour of not more than 27% opacity. [40 C.F.R. § 60.43(c)] This opacity standard has been streamlined to the lower limit (20% opacity on a six-minute block average basis) required under 06-096 C.M.R. ch. 101, § 4(A)(2).

3. Monitoring Requirements

   a. Except as provided in paragraph (3) below, when firing distillate fuel, BYF shall conduct performance tests on Boilers #P1, #P2, and #P3 for opacity using 40 C.F.R. Part 60, Appendix A, Method 9 according to the following schedule: [40 C.F.R. § 60.47c(a)]

      (1) If no visible emissions were observed in the most recent Method 9 performance test, the next performance test shall be completed within 12 calendar months or within 45 days of firing oil in the boiler, whichever is later.

(2) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was less than or equal to 5% opacity, the next performance test shall be completed within 6 calendar months or within 45 days of firing oil in the boiler, whichever is later.
(3) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 5% but less than or equal to 10% opacity, the next performance test shall be completed within 3 calendar months or within 45 days of firing oil in the boiler, whichever is later.
(4) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 10% opacity, the next performance test shall be completed within 45 days.

b. The observation period for the Method 9 performance test may be reduced from 3 hours to 60 minutes if all 6-minute block averages are less than 10% opacity and all individual 15-second observations are less than or equal to 20% opacity during the initial 60 minutes of observation.

c. If the visible emission observed in the most recent Method 9 performance test were less than 10% opacity, BYF may elect to perform subsequent performance tests using 40 C.F.R. Part 60, Appendix A, Method 22 as follows:

(1) BYF shall conduct 10-minute observations each operating day Boilers #P1, #P2, and #P3 fire oil using Method 22.
(2) If no visible emissions are observed for 10 operating days, BYF may reduce observations to once every 7 operating days. If any visible emissions are observed, daily observations shall be resumed.
(3) If the sum of the occurrence of any visible emissions is greater than 30 seconds per 10-minute observation, BYF shall immediately conduct a 30-minute observation.
(4) If the sum of the occurrence of any visible emissions is greater than 90 seconds per 30-minute observation, BYF shall either document the adjustments made to Boiler # and demonstrate within 24 hours that the sum of the occurrence of any visible emissions is not greater than 90 seconds per 30-minute observation or conduct a Method 9 performance test within 45 days.

4. Reporting and Recordkeeping

a. BYF shall maintain records of the amounts of each fuel combusted during each month with fuel certifications. [40 C.F.R. § 60.48c(g)]

b. For each opacity performance test performed, BYF shall maintain records of the following:

(1) Dates and time intervals of all opacity or visible emissions observation periods;
(2) Name and affiliation for each visible emission observer participating in the performance test. For Method 9 performance tests, include a copy of the current visible emission reading certification for each visible emission observer.
(3) Copies of all visible emission observer opacity field data sheets; and
(4) Documentation of any adjustments made and the time the adjustments were completed to demonstrate compliance with the applicable monitoring requirements (Method 22 observations only).

c. BYF shall submit semi-annual reports to EPA and to the Department. [40 C.F.R. § 60.48c(d)] These reports shall include the following:

(1) Calendar dates covered in the reporting period; [40 C.F.R. § 60.48c(e)(1)]
(2) Records of fuel supplier certifications; [40 C.F.R. § 60.48c(e)(11)] and
(3) Any instances of excess emissions (including opacity) from Boilers #P1, #P2, and #P3. [40 C.F.R. § 60.48c(c)]

d. The semi-annual reports are due within 30 days of the end of each six-month period. [40 C.F.R. § 60.48c(j)]

(20) **Fugitive Emissions**

A. BYF shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

B. BYF shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

(22) **Annual Emission Statements**

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, BYF 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 as specified by the date in 06-096 C.M.R. ch. 137.

B. BYF shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:

1. The amount of distillate fuel fired in Boilers #P1, #P2, and #P3 and Generators #1 and #2 (each) on a monthly basis;
2. The sulfur content of the distillate fuel fired in Boilers #P1, #P2, and #P3 and Generators #1 and #2;
3. The amount of propane (LPG) fired in Boilers #P1, #P2, #P3, and #P4; Vaporizers #1 and #2; and Generator #3; and
4. The amount of natural gas fired in Boilers #P1, #P2, #P3, and #P4.

C. Every third year, or as requested by the Department, BYF shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. BYF shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).
[38 M.R.S. § 353-A(1-A)]

The following is a new condition:

(24) 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, BYF may be required to submit additional information. Upon written request from the Department, BYF 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 25th DAY OF NOVEMBER, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____ for ____
MELANIE LOYZIM, COMMISSIONER

The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-937-71-O-R (issued 01/03/2018).

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: September 12, 2025
Date of application acceptance: September 16, 2025

This Order prepared by Zac Hicks, Bureau of Air Quality.