



DEPARTMENT ORDER

Maritimes & Northeast Pipeline, L.L.C.
York County
South Berwick, Maine
A-1159-71-A-N

Departmental
Findings of Fact and Order
Air Emission License

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 (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Maritimes & Northeast Pipeline, L.L.C. (M&N) has applied for an Air Emission License for the operation of emission sources associated with a new natural gas metering and regulating facility.

The equipment addressed in this license will be located off Dow Highway in South Berwick, Maine.

B. Title, Right, or Interest

In their application, M&N submitted copies of a property easement demonstrating M&N's interest in the facility and legal right to construct, maintain, and operate both above and below ground pipeline equipment. M&N has provided sufficient evidence of title, right, or interest in the facility for purposes of this air emission license.

C. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Rated Thermal Input Capacity (MMBtu/hr)	Maximum Firing Rate (scf/hr)	Fuel Type, % sulfur	Date of Install.
Boiler #1	3.0	2,940	Pipeline Quality Natural gas, Negligible	2022
Boiler #2	3.0	2,940		2022
Boiler #3	3.0	2,940		2022
Boiler #4	3.0	2,940		2022

Station piping and filters/separators are not considered emissions equipment except for potential fugitive emissions which are addressed in this license.

Stationary Engines

Equipment	Max. Rated Thermal Input Capacity (MMBtu/hr)	Rated Output Capacity (HP)	Maximum Firing Rate (scf/hr)	Fuel Type, % sulfur	Date of Install.
Generator #1	1.0	103	1,013	Pipeline Quality Natural gas, Negligible	2022

M&N may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, M&N may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

D. Definitions

Records or Logs mean either hardcopy or electronic records.

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a

seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

E. 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.

A new source is considered a major source based on whether or not total licensed annual emissions exceed the “Significant Emission” levels as defined in the Department’s *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100.

Pollutant	Total Licensed Annual Emissions (tpy)	Significant Emission Levels
PM	0.4	100
PM ₁₀	0.4	100
SO ₂	0.4	100
NO _x	2.5	100
CO	8.6	100
VOC	2.3	50

The Department has determined the facility is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

F. Facility Classification

The facility is licensed as follows:

- As a natural minor source of air emissions, because no license restrictions are necessary to keep facility emissions below major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

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. Project Description

Along the natural gas pipeline, there are aboveground facilities that boost the pressure of the natural gas (i.e., compressor stations) and also facilities that meter and regulate the pressure of the gas at the point of custody transfer with a customer, such as another gas transmission line (i.e., M&R stations).

This project involves the construction of a new M&R station which will consist of regulation, metering, filtering, heating, and odorizing of the natural gas from the M&N pipeline and input of up to 100 dekatherms per day into the Granite State Gas Transmission (GSGT) distribution pipeline owned by Unitil Corporation.

The facility will include natural gas-fired boilers, an emergency engine, a 940-gallon filter/separator vessel, and piping components.

C. Boilers #1 - #4

M&N proposes to install four natural gas fired boilers (Boilers #1 - #4). Following pressure reduction of the natural gas from the higher pressure M&N transmission pipeline to the lower pressure GSGT pipeline, the boilers will provide indirect heat to the natural gas to maintain gas temperature above the dew point at which liquid hydrocarbons would form. Natural gas cools as pressure drops and due to the significant pressure drop between the M&N transmission pipeline and the GSGT pipeline, heating of the gas is necessary to prevent freezing of any hydrocarbons and to keep equipment from freezing.

All four units are each rated at a maximum heat input of 3.0 MMBtu/hr based on a fuel heating value of 1,020 MMBtu/scf.

1. BACT Findings

Following is a BACT analysis for control of emissions from Boilers #1 - #4.

a. Particulate Matter (PM, PM₁₀)

M&N has proposed to burn only low-ash content fuels (natural gas) in the boilers. Additional add-on pollution controls are not economically feasible due to the cost of control equipment compared to the relatively small amount of pollutant controlled.

BACT for PM/PM₁₀ emissions from Boilers #1 - #4 is the firing of only natural gas and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO₂)

M&N has proposed to fire only natural gas in the boilers. The use of this fuel results in minimal emissions of SO₂, and additional add-on pollution controls are not economically feasible due to the cost of control equipment compared to the relatively small amount of pollutant controlled.

BACT for SO₂ emissions from Boilers #1 - #4 is the firing of only natural gas and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)

M&N has proposed the use of low-NO_x burners (LNBs) on Boilers #1 - #4 which will result in a reduction of NO_x emissions by approximately 50%. Additional add-on pollution controls are not economically feasible due to the cost of control equipment compared to the relatively small amount of pollutant controlled.

BACT for NO_x emissions from Boilers #1 - #4 is the firing of only natural gas, use of LNBs, and the emission limits listed in the tables below.

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

Several control strategies for the control of CO and VOC were considered including oxidation catalysts and thermal oxidizers.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the boilers in question. These controls were determined to not be economically feasible.

BACT for CO and VOC emissions from Boilers #1 - #4 is the firing of only natural gas and the emission limits listed in the tables below.

e. Emission Limits

The BACT emission limits for Boilers #1 - #4 were based on the following:

PM/PM ₁₀	- 7.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
SO ₂	- 5.71 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98 Assumes 2 grains of sulfur per 100 scf pursuant to M&N's tariff.
NO _x	- 50 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
CO	- 84 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
VOC	- 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	- 06-096 C.M.R. ch. 101

The BACT emission limits for Boilers #1 - #4 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1	PM	0.01
Boiler #2	PM	0.01
Boiler #3	PM	0.01
Boiler #4	PM	0.01

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.02	0.02	0.02	0.15	0.25	0.02
Boiler #2	0.02	0.02	0.02	0.15	0.25	0.02
Boiler #3	0.02	0.02	0.02	0.15	0.25	0.02
Boiler #4	0.02	0.02	0.02	0.15	0.25	0.02

2. Visible Emissions

Visible emissions from Boilers #1 - #4 (each) 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 their size, Boilers #1 - #4 are not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

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

Boilers #1 - #4 are 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 JJJJJ. Natural gas-fired units are exempt from the requirements of this regulation. [40 C.F.R. §§63.11195(e)]

D. Generator #1

M&N proposes to install an emergency generator (Generator #1). An emergency generator is a generator set consisting of an engine and an electrical generator. Generator #1 will consist of a 103-horsepower natural gas-fired engine with a 60-kilowatt electrical generator. Generator #1 will have a maximum heat input of 1.0 MMBtu/hr and will be manufactured in 2021 or later.

1. BACT Findings

The BACT emission limits for Generator #1 are based on the following:

- PM/PM₁₀ - 0.01 lb/MMBtu based on AP-42 Table 3.2-2 dated 7/00
- SO₂ - 5.6 x 10⁻³ lb/MMBtu based on AP-42 Table 3.2-2 dated 7/00
Assumes 2 grains of sulfur per 100 scf pursuant to M&N's tariff.
- NO_x - 10 g/hp-hr based on 40 C.F.R. Part 60, Subpart JJJJ, Table 1
- CO - 387 g/hp-hr based on 40 C.F.R. Part 60, Subpart JJJJ, Table 1
- VOC - 0.118 lb/MMBtu based on AP-42 Table 3.2-2 dated 7/00
- Visible Emissions - 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Generator #1 are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.01	0.01	–	2.27	87.88	0.12

Visible emissions from Generator #1 shall not exceed 10% opacity on a six-minute block average basis.

The Department has determined that the proposed BACT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit for the generator has been streamlined to the more stringent BACT limit, and only this more stringent limit shall be included in the air emission license.

2. 40 C.F.R. Part 60, Subpart JJJJ

Standards of Performance for Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ is applicable to the emergency engine listed above since the unit will be ordered after June 12, 2006, and manufactured after January 1, 2009. [40 C.F.R. § 60.4230] By meeting the requirements of 40 C.F.R. Part 60, Subpart JJJJ, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart JJJJ requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart JJJJ, a stationary reciprocating internal combustion engine (ICE) is considered an emergency stationary ICE (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 40 C.F.R. Part 60, Subpart JJJJ, 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 ICE 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.

[40 C.F.R. §§ 60.4243(d) and 60.4248]

b. Emission Standards

Generator #1 is subject emission standards for emergency engines between 25 – 130 Hp contained in 40 C.F.R. Part 63, Subpart JJJJ, Table 1 pursuant to 40 C.F.R. § 63.4233(d).

c. Certified vs. Non-Certified Engine

Subpart JJJJ requires M&N to either purchase an engine certified by the manufacturer to meet the applicable emission standards or, for non-certified engines, to demonstrate compliance with the emission standards through performance testing.

(1) Certified Engine

(i) If M&N purchases a certified engine and elects to operate it as a certified engine:

1. The engine shall be certified by the manufacturer as meeting the emission standards for emergency engines between 25 – 130 Hp found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. §§ 60.4233(d) & 60.4243(b)(1)]
2. The engine shall be operated and maintained according to the manufacturer's written instructions. M&N may only change those settings that are permitted by the manufacturer. [40 C.F.R. §§ 60.4243(a)(1) & (b)(1)]
3. A copy of the manufacturer's written instructions shall be provided to the Department upon request.
[06-096 C.M.R. ch. 115, BACT]

(ii) If M&N purchases a certified engine and elects to not operate it as a certified engine:

1. M&N shall keep a maintenance plan and records of conducted maintenance. M&N shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. §§ 60.4243(b)(1) and 60.4243(a)(2)(ii)]

2. M&N shall conduct an initial performance test within 1 year of engine startup to demonstrate compliance with the applicable NO_x, CO, and VOC emission standards in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. §§ 60.4243(a)(2)(ii) & (b)(1)]

M&N shall provide 30-days' notice of any performance test to both the Department and EPA. [40 C.F.R. § 60.8(d)]

Performance tests shall be conducted in accordance with 40 C.F.R. § 60.4244 including, but not limited to, the following:

- (1) Each performance test shall be conducted within 10% of 100% peak (or the highest achievable) load. [40 C.F.R. § 60.4244(a)]
 - (2) When calculating emissions of VOC, emissions of formaldehyde shall not be included. [40 C.F.R. § 60.4244(f)]
3. M&N shall submit a copy of each performance test report to the Department and EPA within 30 days after the test has been completed. [40 C.F.R. § 60.4245(d) and 06-096 C.M.R. ch. 115]
 4. M&N shall notify the Department in writing within 30 days if at any point it intends to operate Generator #1 as a non-certified engine. [06-096 C.M.R. ch. 115, BACT]

(2) Non-Certified Engine

If M&N purchases a non-certified engine:

(i) Compliance Demonstration

Within 60 days of achieving the maximum production rate, but not later than 180 days from initial startup, M&N shall conduct an initial performance test on the engine to demonstrate compliance with the applicable NO_x, CO, and VOC emission standards in Table 1. [40 C.F.R. §§ 60.8(a) and 60.4243(b)(2)(i)]

M&N shall provide 30-days' notice of any performance test to both the Department and EPA. [40 C.F.R. § 60.8(d)]

Performance tests shall be conducted in accordance with 40 C.F.R. § 60.4244 including, but not limited to, the following:

- (1) Each performance test shall be conducted within 10% of 100% peak (or the highest achievable) load. [40 C.F.R. § 60.4244(a)]

(2) When calculating emissions of VOC, emissions of formaldehyde shall not be included. [40 C.F.R. § 60.4244(f)]

(ii) Maintenance Plan

M&N shall keep a maintenance plan and records of conducted maintenance. M&N shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 60.4243(b)(2)(i)]

(iii) Reporting

M&N shall submit a copy of each performance test report to the Department and EPA within 30 days after the test has been completed. [40 C.F.R. § 60.4245(d) and 06-096 C.M.R. ch. 115]

d. Non-Resettable Hour Meter Requirements

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4237]

e. Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall be limited to 100 hours/year for maintenance and testing. The emergency engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are included in the 100 hours total allowed for maintenance and testing. The 50 hours for non-emergency use cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 C.F.R. § 60.4243(d)]

f. Recordkeeping

M&N shall keep records of the following for Generator #1:

- (1) All notifications submitted to comply with this subpart; [40 C.F.R. § 60.4245(a)]
- (2) All maintenance conducted on the engine; [40 C.F.R. § 60.4245(a)]
- (3) Documentation that the engine meets the emission standards (e.g., copies of performance test reports or supplier certification). [40 C.F.R. § 60.4245(a)]
- (4) Hours of operation for 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. § 60.4245(b)]

E. Fugitive Emissions of VOC

The 940-gallon filter/separator vessel will be used to store any condensate collected. Removing condensate is a necessary activity to ensure that the natural gas in the pipeline remains as dry as possible. The filter/separator vessel will have very small losses from flashing which occurs when the liquid stream from the separation unit flows into an atmospheric tank. Additionally, operation of the facility's equipment and maintenance activities will result in fugitive emissions of natural gas. Annual combined emissions of VOC from fugitive emissions is not expected to exceed 1.9 tpy based on expected operation and calculations using emission factors from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, Table 2-4, dated November 1995.¹

M&N shall keep records of the venting of natural gas for maintenance activities or any other reason. M&N shall notify the Department in advance of any scheduled venting event that is expected to result in the release of more than 85,000 scf of natural gas. M&N shall notify the Department within two working days of any unscheduled venting event that results in the release of more than 85,000 scf of natural gas.

Periodically, the collected condensate will be emptied into drums and shipped off-site for disposal. Condensate shall be stored in vapor-tight, non-leaking containers. The containers shall be kept closed at all times except when the container is being filled, emptied, or is otherwise actively in use.

F. Fugitive Visible Emissions

Visible emissions from a fugitive emission source (including roadways) shall not exceed 20% opacity on a five-minute block average basis.

G. Performance Test Protocol

For any performance testing required by this license, M&N shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

The Department's Performance Testing Guidance is available online at:
<https://www.maine.gov/dep/air/emissions/testing.html>

¹ <https://www3.epa.gov/ttnchie1/efdocs/equiplks.pdf>

H. 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. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- Unlimited operation of Boilers #1 - #4;
- Operating Generator #1 for 100 hrs/yr; and
- A limit on fugitive VOC emissions of 1.9 tpy.

Please note, this information provides the basis for fee calculation only and should not be construed to 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	SO ₂	NO _x	CO	VOC
Boiler #1	0.1	0.1	0.1	0.6	1.1	0.1
Boiler #2	0.1	0.1	0.1	0.6	1.1	0.1
Boiler #3	0.1	0.1	0.1	0.6	1.1	0.1
Boiler #4	0.1	0.1	0.1	0.6	1.1	0.1
Generator #1	–	–	–	0.1	4.4	–
Fugitive	–	–	–	–	–	1.9
Total TPY	0.4	0.4	0.4	2.5	8.8	2.3

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
SO ₂	50
NO _x	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

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 A-1159-71-A-N subject to the following conditions.

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 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 (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 115.
[06-096 C.M.R. ch. 115]

- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]
- (4) 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. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]
- (7) The licensee shall maintain and operate all emission units and air pollution 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. 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. 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 a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]
- (10) 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. 115]
- (11) 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 to demonstrate compliance with the applicable emission standards 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; or
 2. 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. 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, 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; and
 - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
[06-096 C.M.R. ch. 115]
- (13) Notwithstanding any other provisions 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 license requirement. [06-096 C.M.R. ch. 115]

- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]
- (15) Upon written request from 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 a 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. 115]
- (16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **Boilers #1 - #4**

A. M&N shall fire only natural gas in Boilers #1 - #4. [06-096 C.M.R. ch. 115, BACT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.01	06-096 C.M.R. ch. 115, BACT
Boiler #2	PM	0.01	06-096 C.M.R. ch. 115, BACT
Boiler #3	PM	0.01	06-096 C.M.R. ch. 115, BACT
Boiler #4	PM	0.01	06-096 C.M.R. ch. 115, BACT

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

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.02	0.02	0.02	0.15	0.25	0.02
Boiler #2	0.02	0.02	0.02	0.15	0.25	0.02
Boiler #3	0.02	0.02	0.02	0.15	0.25	0.02
Boiler #4	0.02	0.02	0.02	0.15	0.25	0.02

D. Visible emissions from Boilers #1 - #4 (each) shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

(18) **Generator #1**

- A. Generator #1 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BACT]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.01	0.01	–	2.27	87.88	0.12

C. Visible Emissions

Visible emissions from Generator #1 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

- D. Generator #1 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart JJJJ, including the following:
[incorporated under 06-096 C.M.R. ch. 115, BACT]

1. Certified Engine

- a. If M&N purchases a certified engine and elects to operate it as a certified engine:
- (1) The engine shall be certified by the manufacturer as meeting the emission standards for emergency engines between 25 – 130 Hp found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. §§ 60.4233(d) & 60.4243(b)(1)]
 - (2) The engine shall be operated and maintained according to the manufacturer's written instructions. M&N may only change those settings that are permitted by the manufacturer.
[40 C.F.R. §§ 60.4243(a)(1) & (b)(1)]
 - (3) A copy of the manufacturer's written instructions shall be provided to the Department upon request. [06-096 C.M.R. ch. 115, BACT]
- b. If M&N purchases a certified engine and elects to not operate it as a certified engine:
- (1) M&N shall keep a maintenance plan and records of conducted maintenance. M&N shall, to the extent practicable, maintain and operate the engine in a

manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. §§ 60.4243(b)(1) and 60.4243(a)(2)(ii)]

- (2) M&N shall conduct an initial performance test within 1 year of engine startup to demonstrate compliance with the applicable NO_x, CO, and VOC emission standards in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. §§ 60.4243(a)(2)(ii) & (b)(1)]
- (3) M&N shall provide 30-days' notice of any performance test to both the Department and EPA. [40 C.F.R. § 60.8(d)]
- (4) Performance tests shall be conducted in accordance with 40 C.F.R. § 60.4244 including, but not limited to, the following:
 - (i) Each performance test shall be conducted within 10% of 100% peak (or the highest achievable) load. [40 C.F.R. § 60.4244(a)]
 - (ii) When calculating emissions of VOC, emissions of formaldehyde shall not be included. [40 C.F.R. § 60.4244(f)]
- (5) M&N shall submit a copy of each performance test report to the Department and EPA within 30 days after the test has been completed. [40 C.F.R. § 60.4245(d) and 06-096 C.M.R. ch. 115]
- (6) M&N shall notify the Department in writing within 30 days if at any point it intends to operate Generator #1 as a non-certified engine. [06-096 C.M.R. ch. 115, BACT]

2. Non-Certified Engine

If M&N purchases a non-certified engine:

- a. Within 60 days of achieving the maximum production rate, but not later than 180 days from initial startup, M&N shall conduct an initial performance test on the engine to demonstrate compliance with the applicable NO_x, CO, and VOC emission standards in Table 1. [40 C.F.R. §§ 60.8(a) and 60.4243(b)(2)(i)]
- b. M&N shall provide 30-days' notice of any performance test to both the Department and EPA. [40 C.F.R. § 60.8(d)]
- c. Performance tests shall be conducted in accordance with 40 C.F.R. § 60.4244 including, but not limited to, the following:
 - (1) Each performance test shall be conducted within 10% of 100% peak (or the highest achievable) load. [40 C.F.R. § 60.4244(a)]

(2) When calculating emissions of VOC, emissions of formaldehyde shall not be included. [40 C.F.R. § 60.4244(f)]

- d. M&N shall keep a maintenance plan and records of conducted maintenance. M&N shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 60.4243(b)(2)(i)]
 - e. M&N shall submit a copy of each performance test report to the Department and EPA within 30 days after the test has been completed. [40 C.F.R. § 60.4245(d) and 06-096 C.M.R. ch. 115]
3. Non-Resetable Hour Meter
A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4237]
 4. Annual Time Limit for Maintenance and Testing
As an emergency engine, the unit shall be limited to 100 hours/year for maintenance and testing. The emergency engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are included in the 100 hours total allowed for maintenance and testing. The 50 hours for non-emergency use cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 C.F.R. § 60.4243(d)]
 5. Recordkeeping
M&N shall keep records of the following for Generator #1:
 - a. All notifications submitted to comply with this subpart; [40 C.F.R. § 60.4245(a)]
All maintenance conducted on the engine; [40 C.F.R. § 60.4245(a)]
 - b. Documentation that the engine meets the emission standards (e.g., copies of performance test reports or supplier certification).[40 C.F.R. § 60.4245(a)]
 - c. Hours of operation for 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. § 60.4245(b)]

(19) **Fugitive Emissions of VOC**

- A. M&N shall keep records of the venting of natural gas (date, time, duration, and scf) for maintenance activities or any other reason. [06-096 C.M.R. ch. 115, BACT]

- B. M&N shall notify the Department in advance of any scheduled venting event that is expected to result in the release of more than 85,000 scf of natural gas. M&N shall notify the Department within two working days of any unscheduled venting event that results in the release of more than 85,000 scf of natural gas.
[06-096 C.M.R. ch. 115, BACT]
- C. Condensate shall be stored in vapor-tight, non-leaking containers. The containers shall be kept closed at all times except when the container is being filled, emptied, or is otherwise actively in use. [06-096 C.M.R. ch. 115, BACT]

(20) **Fugitive Visible Emissions**

Visible emissions from a fugitive emission source (including roadways) shall not exceed 20% opacity on a five-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

(21) **Performance Test Protocol**

For any performance testing required by this license, M&N shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test.
[06-096 C.M.R. ch. 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 2nd DAY OF MARCH, 2022.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[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: 12/2/2021
Date of application acceptance: 12/3/2021

Date filed with the Board of Environmental Protection:

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

