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

DEPARTMENT ORDER

City of Portland – Portland Arts and Technology High School **Cumberland County** **Portland, Maine** **A-36-71-J-R/A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Renewal and** **After-the Fact Amendment**

FINDINGS OF FACT

After review of the air emission license renewal and 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

The City of Portland – Portland Arts and Technology High School (PATHS) applied to renew their Air Emission License for the operation of emission sources associated with their educational facility.

The equipment addressed in this license is located at 196 Allen Avenue, Portland, Maine.

PATHS has requested an after-the-fact amendment to their license in order to make the following changes:

1. Remove two boilers from the license;
2. Add three new boilers, installed in 2024, to the license;
3. Add the Greenhouse Boiler to the license;
4. Remove a generator, a paint booth, and woodshop dust collectors; and
5. Remove fuel limits from the facility.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #1 *	2.51	2,460.8 scf/hr	Natural Gas	Nov. 2022	2024	1
Boiler #2 *	2.51	2,460.8 scf/hr	Natural Gas	Nov. 2022	2024	1
Boiler #3 *	2.51	2,460.8 scf/hr	Natural Gas	Nov. 2022	2024	1

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Greenhouse Boiler *	1.3	9.3 gal/hr	Distillate Fuel	2025	Apr. 2025	-
Paint Booth Heater	1.3	13.8 gal/hr	Propane	1991	1991	-
*Boiler #1 (old) **	*8.0*	*7,810 scf/hr*	*Natural Gas*	*1976*	*1976*	*1*
		56.9 gal/hr	*Distillate Fuel*			
*Boiler #2 (old) **	*8.0*	*7,810 scf/hr*	*Natural Gas*	*1976*	*1976*	*1*
		56.9 gal/hr	*Distillate Fuel*			

* New to license
** Removed from license

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW or HP)	Fuel Type	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Generator #1	1.42	125 kW	Distillate Fuel	10.4	2006	2006
*Generator #2 **	*1.0*	-	*Propane*	*10.3*	*1975*	*1975*

* Removed from license

Process Equipment

Equipment	Production Rate	Pollution Control Equipment
*Paint Booth #1 **	*Variable*	*Particulate Filters*
Paint Booth #1 (Previously #2)	Variable	Particulate Filters
Paint Booth #2 (Previously #3)	Variable	Particulate Filters
*Woodworking Equipment**	*Variable*	*Dust Collector and Cyclone*

* Removed from license

PATHS operates two light aliphatic naphtha solution parts washers that are subject to applicable requirements in *Solvent Cleaners,* 06-096 C.M.R. ch. 130.

C. Definitions

Cleaning Activities means the use of solvents to remove contaminants including, but not limited to, adhesives, inks, paint, dirt, soil, oil, and grease from parts, products, tools, machinery, equipment, vessels, and work production related areas for a variety of reasons, including safety, operability, and to avoid product contamination; this includes activities such as wiping, flushing, or spraying. Examples of such activities may include, but are not limited to, the cleaning of spray booths, spray guns, and printing presses.

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.

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.

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.

PATHS has applied to renew currently licensed emission units as well as modify their license as addressed in Section I(A) above.

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	1.1	2.6	+1.5	100
PM_{10}	1.1	2.6	+1.5	100
$PM_{2.5}$	1.1	2.6	+1.5	100
SO_2	5.6	-	-5.6	100
NO_x	2.2	5.2	+3.0	100
CO	1.2	3.5	+2.3	100
VOC	0.5	0.5	0.0	50*

* PATHS is located in an area of the state included in the Ozone Transport Region. Therefore, the significant emission level for VOC is 50 tpy.

Note: The reduction in SO_2 was a result of converting from 0.5% sulfur content distillate fuel to 0.0015% sulfur content distillate fuel per current fuel sulfur content requirements. [06-096 C.M.R. ch. 106, § 3(A)(2)] Because of the resulting lower SO_2 emissions totals, fuel use caps in the previous license were removed, which caused an increase in potential emissions of other pollutants.

Therefore, this license is considered to be both a renewal and a minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules C.M.R. ch. 115.

E. Facility Classification

With the annual VOC limits associated with the paint booths and parts washers and the operating hours restriction on the emergency generator, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because PATHS is subject to license restrictions that keep facility emissions below major source thresholds for VOC; 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 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. Boilers #1-#3, Greenhouse Boiler, and Paint Booth Heater

PATHS operates Boilers #1 - #3 for facility heating. Boilers #1 - #3 are each rated at 2.51 MMBtu/hr and fire natural gas. Boilers #1 - #3 were installed in 2024 and exhaust through a combined stack, Stack #1.

PATHS operates the Greenhouse Boiler for heating the greenhouse. The Greenhouse Boiler is rated at 1.3 MMBtu/hr and fires distillate fuel. The Greenhouse Boiler was installed in April 2025 and exhausts through its own stack.

The Greenhouse Boiler is licensed to fire distillate fuel. With limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in the Greenhouse Boiler shall not exceed 0.0015% by weight (15 ppm).

PATHS operates Paint Booth Heater for occasional automobile paint curing. Paint Booth Heater is rated at 1.3 MMBtu/hr and fires propane. Paint Booth Heater was installed in 1991 and exhausts through its own stack.

1. BACT Findings – Boilers #1 - #3

PATHS submitted a BACT analysis for control of emissions from Boilers #1 - #3.

a. Particulate Matter (PM, PM_{10}, $PM_{2.5}$)
PATHS has proposed to burn only natural gas in Boilers #1 - #3 and to ensure proper combustion and maintenance practices. Additional add-on pollution controls are not economically feasible.

BACT for $PM/PM_{10}/PM_{2.5}$ emissions from Boilers #1 - #3 is the use of an oxygen trim system and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)

PATHS has proposed to fire only natural gas in Boilers #1 - #3. The use of this fuel results in minimal emissions of SO_2, and additional add-on pollution controls are not economically feasible.

BACT for SO_2 emissions from Boilers #1 - #3 is the use of natural gas and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)

PATHS considered several control strategies for the control of NO_x including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, flue gas recirculation (FGR), and low-NO_x burners.

Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. Both methods include injection of a NO_x reducing agent, typically ammonia or urea, into the boiler combustion gases, where the reagent reacts with NO_x to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units larger than Boilers #1 - #3.

Water/steam injection and FGR can attain similar NO_x reduction efficiencies through lowering burner flame temperature and thereby reducing thermal NO_x formation. However, both control strategies reduce the boiler's fuel efficiency.

Due to the relatively small sizes of Boilers #1 - #3, firing natural gas, and anticipated emissions of 1.1 ton/year each, the addition of low-NO_x burners would not be economically feasible.

BACT for NO_x emissions from Boilers #1 - #3 is the emission limits listed in the tables below.

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

PATHS considered several strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of proper combustion and maintenance practices.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the boiler in question. These controls were determined to be economically infeasible.

BACT for CO and VOC emissions from Boilers #1 - #3 is the use of proper combustion and maintenance practices and the emission limits listed in the tables below.

e. Emission Limits
The BACT emission limits for Boilers #1 - #3 were based on the following:

Natural Gas

$PM/PM_{10}/PM_{2.5}$	–	0.05 lb/MMBtu, 06-096 C.M.R. ch. 115, BACT
SO_2	–	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO_x	–	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	–	84 lb/MMscf based on AP-42 Table 1.4-1 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

2. BACT Findings – Greenhouse Boiler and Paint Booth Heater

PATHS submitted a BACT analysis for control of emissions from the Greenhouse Boiler and the Paint Booth Heater.

a. Particulate Matter (PM, PM_{10}, $PM_{2.5}$)
PATHS has proposed to burn only low-ash content fuels (propane and distillate fuel) in the Greenhouse Boiler and the Paint Booth Heater. Additional add-on pollution controls are not economically feasible.

BACT for $PM/PM_{10}/PM_{2.5}$ emissions from the Greenhouse Boiler and the Paint Booth Heater is the use proper combustion and maintenance practices and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)
PATHS has proposed to fire only distillate fuel with a sulfur content not to exceed 0.0015% by weight and propane in the Greenhouse Boiler and the Paint Booth Heater, respectively. The use of these fuels results in minimal emissions of SO_2, and additional add-on pollution controls are not economically feasible.

BACT for SO_2 emissions from the Greenhouse Boiler and the Paint Booth Heater is the use of ultra-low-sulfur distillate fuel and propane, respectively, and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)

PATHS considered several control strategies for the control of NO_x including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, flue gas recirculation (FGR), low-NO_x burners, and use of oxygen trim systems.

Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. Both methods include injection of a NO_x reducing agent, typically ammonia or urea, into the boiler combustion gases, where the reagent reacts with NO_x to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units larger than the Greenhouse Boiler and Paint Booth Heater.

Water/steam injection and FGR can attain similar NO_x reduction efficiencies through lowering burner flame temperature and thereby reducing thermal NO_x formation. However, both control strategies reduce the boiler's fuel efficiency.

Due to the relatively small sizes of the Greenhouse Boiler and the Paint Booth Heater, firing distillate fuel and propane, the addition of low-NO_x burners and oxygen trim systems would not be economically feasible.

BACT for NO_x emissions from the Greenhouse Boiler and the Paint Booth Heater is the use of proper combustion and maintenance practices and the emission limits listed in the tables below.

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

PATHS considered several strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of an oxygen trim system.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the boiler in question. These controls were determined to be economically infeasible.

The addition of an oxygen trim system for units of this size is economically infeasible for this facility.

BACT for CO and VOC emissions from the Greenhouse Boiler and the Paint Booth Heater is the use of proper combustion and maintenance practices and the emission limits listed in the tables below.

e. Emission Limits

The BACT emission limits for the Greenhouse Boiler and the Paint Booth Heater were based on the following:

Distillate Fuel – Greenhouse Boiler

$PM/PM_{10}/PM_{2.5}$	–	0.08 lb/MMBtu, 06-096 C.M.R. ch. 115, BACT
SO_2	–	based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO_x	–	20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO	–	5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC	–	0.34 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions	–	06-096 C.M.R. ch. 101

Propane – Paint Booth Heater

PM	–	0.05 lb/MMBtu, 06-096 C.M.R. ch. 115, BACT
SO_2	–	0.054 lb/1,000 gal based on AP-42 Table 1.5-1 dated 05/25 and an average sulfur content of 0.54 gr/100 ft^3
NO_x	–	13 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/25
CO	–	7.5 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/25
VOC	–	1 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/25
Visible Emissions	–	06-096 C.M.R. ch. 101

The BACT emission limits for Boilers #1 - #3, Greenhouse Boiler, and the Paint Booth Heater are the following:

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 #1 *Natural Gas*	0.13	0.13	0.13	-	0.24	0.20	0.01
Boiler #2 *Natural Gas*	0.13	0.13	0.13	-	0.24	0.20	0.01
Boiler #3 *Natural Gas*	0.13	0.13	0.13	-	0.24	0.20	0.01
Greenhouse Boiler *Distillate Fuel*	0.10	0.10	0.10	-	0.19	0.05	-
Paint Booth Heater *Propane*	0.07	0.07	0.07	-	0.18	0.11	0.01

3. Visible Emissions

Visible emissions from Stack #1 for Boilers #1 - #3 shall not exceed 10% opacity on a six-minute block average basis.

Visible emissions from the Greenhouse Boiler shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from the Paint Booth Heater shall not exceed 10% opacity on a six-minute block average basis.

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

   Due to their sizes, Boilers #1 - #3, the Greenhouse Boiler, and the Paint Booth Heater 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]

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

   Boilers #1 - #3 and the Paint Booth Heater 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 JJJJJJ. Natural gas-fired and propane-fired units are exempt from the requirements of this regulation. [40 C.F.R. §§ 63.11195(e)]

   The Greenhouse Boiler is not subject to this subpart. It is rated at 1.3 MMBtu/hr and does not generate steam. Hot water heaters, as defined in this subpart and including hot water boilers (i.e., those not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour, are not subject to the requirements of this subpart. [40 C.F.R. § 63.11195]

C. Generator #1

PATHS operates Generator #1 as an emergency generator. Generator #1 is a generator set consisting of an engine and an electrical generator. Generator #1 has an engine rated at 1.42 MMBtu/hr which fires distillate fuel and was manufactured in 2006.

1. BACT Findings

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

$PM/PM_{10}/PM_{2.5}$	–	0.12 lb/MMBtu from 06-096 C.M.R. ch. 115, BPT
SO_2	–	Combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO_x	–	4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25
CO	–	0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25

VOC – 0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25
Visible Emissions – 06-096 C.M.R. ch. 101

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

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)
Generator #1	0.17	0.17	0.17	-	6.26	1.35	0.51

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis.

2. Chapter 169

Generator #1 was installed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 and is therefore exempt from this rule pursuant to section 1.

3. New Source Performance Standards

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to Generator #1 since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, 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 IIII requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart IIII, 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 IIII, 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;
- 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. §§ 60.4211(f) and 60.4219]

b. 40 C.F.R. Part 60, Subpart IIII Requirements

(1) Manufacturer Certification Requirement
Generator #1 shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement
The fuel fired in Generator #1 shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on Generator #1. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements
Generator #1 shall be operated and maintained according to the manufacturer's emission-related written instructions. PATHS may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

PATHS shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(5) Annual Time Limit for Maintenance and Testing
As an emergency engine, Generator #1 shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (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. § 60.4211(f)]

(6) Initial Notification Requirement
No initial notification is required under 40 C.F.R. Part 60, Subpart IIII for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping
PATHS shall keep records that include 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. § 60.4214(b)]

D. Paint Booths #1 and #2

PATHS operates two paint booths in their automotive shop. Paint Booth #1 was manufactured by DeVilbiss in 1991 and is fitted with particulate filters to control overspray from the painting operations. Paint Booth #1 also has an integrated propane heater with a maximum heat input of 1.3 MMBtu/hr to heat the booth up to 160 °F to aid in curing the coatings. Paint Booth #2 was manufactured by Standard Tools and Equipment in 2013. It is no longer used as a painting station and only is used for paint mixing.

PATHS shall operate and maintain filters on Paint Booths #1 and #2, including inspecting them for plugging, wear, or breakthrough resulting in excess visible emissions from the exhaust, at least once per month during months that the Paint Booths are in use, and maintain inspection records. The maintenance log or records shall contain information on maintenance and filter replacement. The filters on Paint Booths #1 and #2 shall be replaced as necessary to comply with the visible emissions limit on the exhaust streams.

PATHS shall only use high volume, low pressure (HVLP) spray guns in the spray booths.

PATHS shall keep monthly records of types and quantities of coatings used in the process. For each coating, records of VOC and HAP content shall be kept based on safety data sheets (SDS) information. VOC emissions from Paint Booths #1 and #2 shall not exceed 0.5 ton/year.

Visible emissions from the spray booth shall not exceed 10% opacity on a six-minute block average basis.

E. Parts Washers

Parts Washers #1 and #2 were manufactured and installed in 1991 and 2013, respectively, and each has a design capacity of 30 gallons. Parts Washers #1 and #2 are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130, and records shall be kept documenting compliance. The parts cleaners use ZEP Dyna 143 as their solvent, which contains no HAPS, but is 100% VOC. ZEP Dyna 143 has a density of 6.6 lbs/gal, and the facility goes through approximately 2.5 gallons per year of combined use in Parts Washers #1 and #2, for an estimated total annual emissions of 16.5 lbs of VOC per year.

This equipment is exempt from *Industrial Cleaning Solvents*, 06-096 C.M.R. ch. 166 pursuant to Section (3)(B).

F. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

G. Fugitive Emissions

PATHS 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.

PATHS 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.

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 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:

- Operating Generator #1 for 100 hrs/yr of non-emergency operation;
- A combined VOC limit for Paint Booths #1 and #2 of 0.5 tpy;
- Operating the boilers and heater for 8,760 hr/yr each.

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
Boiler #1	0.6	0.6	0.6	-	1.1	0.9	0.1
Boiler #2	0.6	0.6	0.6	-	1.1	0.9	0.1
Boiler #3	0.6	0.6	0.6	-	1.1	0.9	0.1
Greenhouse Boiler	0.5	0.5	0.5	-	0.8	0.2	-
Paint Booth Heater	0.3	0.3	0.3	-	0.8	0.5	0.1
Generator #1	-	-	-	-	0.3	0.1	-
Paint Booths #1 and #2	-	-	-	-	-	-	0.5
Total TPY	**2.6**	**2.6**	**2.6**	**-**	**5.2**	**3.5**	**0.9**

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 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.

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 PATHS 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 A-36-71-J-R/A 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 beginning actual 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] Payment of the annual air emission license fee for PATHS is due by the end of May of each year. [38 M.R.S. § 353-A(3)]

(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]

SPECIFIC CONDITIONS

(17) **Boilers #1 - #3, Greenhouse Boiler, and Paint Booth Heater**

A. Fuel

1. 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. 106 § 3(A)(2)]
2. Compliance shall be demonstrated by fuel records showing the type and percent sulfur of the fuel delivered. 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, 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 [06-096 C.M.R. ch. 115, 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)
Boiler #1	0.13	0.13	0.13	-	0.24	0.20	0.01
Boiler #2	0.13	0.13	0.13	-	0.24	0.20	0.01
Boiler #3	0.13	0.13	0.13	-	0.24	0.20	0.01
Greenhouse Boiler	0.10	0.10	0.10	-	0.19	0.05	-
Paint Booth Heater	0.07	0.07	0.07	-	0.18	0.11	0.01

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

D. Visible emissions from the Greenhouse Boiler shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2)]

E. Visible emissions from Paint Booth Heater shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

(18) **Generator #1**

A. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

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

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)
Generator #1	0.17	0.17	0.17	-	6.26	1.35	0.51

C. Visible Emissions

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(4)]

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

1. Manufacturer Certification
Generator #1 shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202. [40 C.F.R. § 60.4205(b)]

2. Ultra-Low Sulfur Fuel
The fuel fired in Generator #1 shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115, BPT]

3. Non-Resettable Hour Meter
A non-resettable hour meter shall be installed and operated on Generator #1. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing
   a. As an emergency engine, Generator #1 shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (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 log) of all engine operating hours. [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115, BPT]

   b. PATHS shall keep records that include 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. § 60.4214(b)]

5. Operation and Maintenance
   Generator #1 shall be operated and maintained according to the manufacturer's emission-related written instructions. PATHS may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

   PATHS shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(19) **Paint Booths #1 and #2**

A. PATHS shall operate and maintain filters on Paint Booths #1 and #2, including inspecting them for plugging, wear, or breakthrough resulting in excess visible emissions from the exhaust, at least once per month during months that the Paint Booths are in use, and maintain inspection records. The maintenance log or records shall contain information on maintenance and filter replacement. The filters on Paint Booths #1 and #2 shall be replaced as necessary to comply with the visible emissions limit on the exhaust streams. [06-096 C.M.R. ch. 115, BPT]

B. PATHS shall only use HVLP spray guns in the spray booths. [06-096 C.M.R. ch. 115, BPT]

C. PATHS shall keep monthly records of types and quantities of coatings used in the process. For each coating, records of VOC and HAP content shall be kept based on safety data sheets (SDS) information. [06-096 C.M.R. ch. 115, BPT]

D. VOC emissions from Paint Booths #1 and #2 shall not exceed 0.5 ton/year. [06-096 C.M.R. ch. 115, BPT]

E. Visible emissions from the spray booth shall not exceed 10% on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(20) **Parts Washers**

Parts washers at PATHS are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

A. PATHS shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 115, BPT]

B. The following standards apply to cold cleaning machines that are applicable sources

under 06-096 C.M.R. ch. 130.

1. PATHS shall attach a permanent conspicuous label to each unit summarizing the following operational standards:
    a. Waste solvent shall be collected and stored in closed containers. The closed container may contain a device that allows pressure relief but does not allow liquid solvent to drain from the container.
    b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
    c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
    d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
    e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
    f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
    g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
    h. Work area fans shall not blow across the opening of the parts washer unit.
    i. The solvent level shall not exceed the fill line.

2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches.
3. Each parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent.

[06-096 C.M.R. ch. 130]

(21) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

(22) **Fugitive Emissions**

A. PATHS 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. PATHS 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)]

(23) 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, PATHS may be required to submit additional information. Upon written request from the Department, PATHS 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 1st DAY OF DECEMBER, 2025.

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: September 10, 2025
Date of application acceptance: September 10, 2025

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