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

DEPARTMENT ORDER

Portland International Jetport **Cumberland County** **Portland, Maine** **A-582-71-K-R/M (SM)**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Renewal and Minor Revision**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Portland International Jetport (Portland Jetport) has applied to renew their Air Emission License for the operation of emission sources associated with their air travel facility.

Portland Jetport has also requested a minor revision to their license in order to add natural gas as a fuel for Central Penthouse Boilers 1 and 2 and designate all of their boilers as gas-fired boilers as defined in 40 Code of Federal Regulations (C.F.R.) Part 63, Subpart JJJJJJ.

The equipment addressed in this license is located at 1001 Westbrook Street, Portland, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Max. Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Date of Install.	Stack #
Central Penthouse Boiler 1*	3.08	22 gal/hr	Distillate fuel, 0.5%	1990	1990	2
		3,080 scf/hr	Natural gas, negl.**			
Central Penthouse Boiler 2*	4.41	31.5 gal/hr	Distillate fuel, 0.5%	1996	1996	12
		4,410 scf/hr	Natural gas, negl.**			
Bag Claim Penthouse Boiler 1	3.8	27.1 gal/hr	Distillate fuel, 0.5%	2004	2004	16
		3,800 scf/hr	Natural gas, negl.			
Bag Claim Penthouse Boiler 2	3.8	27.1 gal/hr	Distillate fuel, 0.5%	2004	2004	17
		3,800 scf/hr	Natural gas, negl.			

Equipment	Max. Capacity (MMBtu/hr)	Max. Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Date of Install.	Stack #
Terminal Expansion Mechanical Room Boiler 1	2.9	20.7 gal/hr	Distillate fuel, 0.5%	2010	2011	21
		2,900 scf/hr	Natural gas, negl.			
Terminal Expansion Mechanical Room Boiler 2	2.9	20.7 gal/hr	Distillate fuel, 0.5%	2010	2011	21
		2,900 scf/hr	Natural gas, negl.			
North Garage Snow Melt Boiler***	9.0	9,000 scf/hr	Natural gas, negl.	2009	2009	N/A****
South Garage Snow Melt Boiler***	13.5	13,500 scf/hr	Natural gas, negl.	2009	2009	N/A****

*Formerly named West Penthouse Boiler 1 and West Penthouse Boiler 2.
**Natural gas is a new licensed fuel for these units.
***Formerly named North Garage Snow Melt Boiler 1 and North Garage Snow Melt Boiler 2.
****Emissions from these units are discharged directly into the melt water from de-icing.

Generators

Equipment	Max. Input Capacity (MMBtu/hr)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.	Stack #
Central Penthouse Generator*	0.938	Distillate fuel, 0.0015%	6.7 gal/hr	1996	1996	11
North Garage Generator	2.88	Natural gas, negl.	2,880 ft^3/hr	2002	2002	13
Lighting Vault Generator	2.506	Distillate fuel, 0.0015%	17.9 gal/hr	2004	2004	15
Bag Claim Penthouse Generator	1.55	Distillate fuel, 0.0015%	11.1 gal/hr	2004	2004	19
Maintenance Building Generator	0.89	Propane, negl.	366 ft^3/hr	1992	1992	18
De-icing Pad Generator	4.69	Distillate fuel, 0.0015%	33.5 gal/hr	2010	2011	20
New Terminal Generator	7.49	Distillate fuel, 0.0015%	53.5 gal/hr	2010	2011	22

*Formerly named West Penthouse 75 kW Generator

Process Equipment

Equipment	Capacity	Material Stored	Location
Parts Washer	30 gallons	-	Maintenance Building
Gasoline Storage Tank	4,000 gallons	Gasoline	Maintenance Building
Distillate Fuel Storage Tank*	6,000 gallons	Distillate Fuel	Maintenance Building

*This unit is considered an insignificant activity per 06-096 C.M.R. ch. 115, Appendix B and is included for inventory purposes only.

C. Definitions

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

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

Gas-fired Boiler. For the purposes of this license and in accordance with 40 C.F.R. Part 63, Subpart JJJJJJ, *gas-fired boiler* means any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

D. Application Classification

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

This amendment will increase emissions by less than 4 ton/year for each single pollutant not including greenhouse gases (GHG) and less than 8 ton/year for all pollutants combined not including GHG. Therefore, this amendment is determined to be a minor revision and has been processed as such.

The application for Portland Jetport does include the licensing of increased emissions but does not include the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

With the annual distillate fuel limit on Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and Terminal Expansion Mechanical Room Boilers 1 and 2, and the operating hour restriction on the emergency generators, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the 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 existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers

Portland Jetport operates Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and Terminal Expansion Mechanical Room Boilers 1 and 2 for heat and hot water. Portland Jetport operates North Garage Snow Melt Boiler and South Garage Snow Melt Boiler for melting snow. The snow melt system has no stack since the emissions are discharged into the water. The snow melt system is comprised of a water-filled melting tank, a burner, a weir tube, a warm water spray, and an over flow drain. The snow is loaded into the water tank, the burner fires downward through a tube immersed in the water. Hot combustion products from the burner mix with the water and travel up through a weir tube. At the top of the tube, the cooled gases exhaust to atmosphere and the warm water is sprayed over the snow to promote additional melting. Overflow water is drained.

The boilers are rated at 3.08 MMBtu/hr, 4.41 MMBtu/hr, 3.8 MMBtu/hr, 3.8 MMBtu/hr, 3.2 MMBtu/hr, 3.2 MMBtu/hr, 9.0 MMBtu/hr, and 13.5 MMBtu/hr, respectively. Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and Terminal Expansion Mechanical Room Boilers 1 and 2 can fire either distillate fuel or natural gas, and North Garage Snow Melt Boiler and South Garage Snow Melt Boiler fire natural gas. North Garage Snow Melt Boiler and South Garage Snow Melt Boiler exhaust through meltwater, Terminal Expansion Mechanical Room Boilers 1 and 2 exhaust through a common stack, and all other boilers exhaust through their own stacks.

1. BPT Findings

The BPT emission limits for Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and Terminal Expansion Mechanical Room Boilers 1 and 2 when firing distillate fuel were based on the following:

PM/PM_{10}	–	0.12 lb/MMBtu based on 06-096 C.M.R. ch. 103
SO_2	–	0.5 lb/MMBtu based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
NO_x	–	20 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
CO	–	5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
VOC	–	0.34 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
Visible Emissions	–	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, Terminal Expansion Mechanical Room Boilers 1 and 2, North Garage Snow Melt Boiler, and South Garage Snow Melt Boiler when firing natural gas were based on the following:

PM/PM_{10}	–	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
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. 115, BPT

The BPT emission limits for the boilers are the following:

Unit	Fuel	Pollutant	lb/MMBtu
Central Penthouse Boilers 1 and 2 [each]	Distillate fuel	PM	0.12
Central Penthouse Boilers 1 and 2 [each]	Natural gas	PM	0.05
Bag Claim Penthouse Boilers 1 and 2 [each]	Distillate fuel	PM	0.12
Bag Claim Penthouse Boilers 1 and 2 [each]	Natural gas	PM	0.05
Terminal Expansion Mechanical Room Boilers 1 and 2 [each]	Distillate fuel	PM	0.12
Terminal Expansion Mechanical Room Boilers 1 and 2 [each]	Natural gas	PM	0.05
North Garage Snow Melt Boiler	Natural gas	PM	0.05
South Garage Snow Melt Boiler	Natural gas	PM	0.05

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Central Penthouse Boiler 1 Distillate fuel	0.37	0.37	1.55	0.44	0.11	0.01
Central Penthouse Boiler 1 Natural gas	0.15	0.15	0.01	0.31	0.26	0.02
Central Penthouse Boiler 2 Distillate fuel	0.53	0.53	2.22	0.63	0.16	0.01
Central Penthouse Boiler 2 Natural gas	0.22	0.22	0.01	0.44	0.37	0.02
Bag Claim Penthouse Boilers 1 and 2 [each] Distillate fuel	0.46	0.46	1.91	0.54	0.14	0.01
Bag Claim Penthouse Boilers 1 and 2 [each] Natural gas	0.19	0.19	0.01	0.38	0.32	0.02
Terminal Expansion Mechanical Room Boilers 1 and 2 [each] Distillate fuel	0.35	0.35	1.46	0.41	0.10	0.01
Terminal Expansion Mechanical Room Boilers 1 and 2 [each] Natural gas	0.15	0.15	0.01	0.29	0.24	0.02
North Garage Snow Melt Boiler Natural gas	0.45	0.45	0.01	0.90	0.76	0.05
South Garage Snow Melt Boiler Natural gas	0.68	0.68	0.01	1.35	1.13	0.07

Visible emissions from Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and the combined stack for Terminal Expansion Mechanical Room Boilers 1 and 2 when firing distillate fuel shall each not exceed 20% opacity on a six-minute block average basis.

Visible emissions from Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, the combined stack for Terminal Expansion Mechanical Room Boilers 1 and 2, North Garage Snow Melt Boiler, and South Garage Snow Melt Boiler when firing natural gas shall each not exceed 10% opacity on a six-minute block average basis.

Portland Jetport shall be limited to 98,000 gallons of distillate fuel on a calendar year total basis. There is no restriction on the use of natural gas in any of the boilers.

Fuel Sulfur Content Requirements

Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and Terminal Expansion Mechanical Room Boilers 1 and 2 are all licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and Terminal Expansion Mechanical Room Boilers 1 and 2 shall not exceed 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type and quantity of fuel used and the sulfur content of the fuel, if applicable.

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

Due to their size, Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, Terminal Expansion Mechanical Room Boilers 1 and 2, and North Garage Snow Melt Boiler 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]

The South Garage Snow Melt Boiler is not subject to 40 C.F.R. Part 60, Subpart Dc. On April 6, 2007, the U.S. Environmental Protection Agency's (EPA) Nancy Helm, Manager of the Office of Air, Waste, and Toxics, sent an applicability determination to Scott Lylle regarding a snowmelter at Ted Stevens Anchorage International Airport. EPA's applicability determination stated that the snowmelter used at Ted Stevens Anchorage International Airport is not subject to the requirements of 40 C.F.R. Part 60, Subpart Dc because: "although a snowmelter is a device that combusts fuel and melts ice resulting in the heating of water, the heated water is not being used for transferring heat from one point to another for any useful purpose such as heating a building or creating steam to drive a process. Therefore, the heated water would not qualify as a heat transfer medium." Because the South Garage Snow Melt Boiler at Portland Jetport is of a similar design and is used in the same way as the snowmelter at Ted Stevens Anchorage International Airport, the South Garage Snow Melt Boiler is therefore not subject to 40 C.F.R. Part 60, Subpart Dc. [40 C.F.R. §§ 60.40c and 60.41c]

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

   Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, Terminal Expansion Mechanical Room Boilers 1 and 2, North Garage Snow Melt Boiler, and South Garage Snow Melt Boiler are all 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. The units are considered gas-fired boilers, which are specifically exempt from this regulation. [40 C.F.R. §§ 63.11193 and 63.11195]

   Any boiler designed to burn fuels beside gaseous fuels prior to June 4, 2010 will be considered an existing boiler under this rule. A boiler which currently fires gaseous fuels, but converts back to firing another fuel (such as distillate fuel) in the future would become subject as either an existing (or new) boiler at the time it is converted back to oil.

   Portland Jetport shall maintain records of the yearly operating hours each boiler fires distillate fuel. If any individual boiler exceeds 48 hours firing distillate fuel for periodic testing, maintenance, or operator training during a calendar year, that boiler will become subject to all applicable requirements for 40 C.F.R. Part 63, Subpart JJJJJJ for existing oil-fired boilers (Central Penthouse Boilers 1 and 2 and Bag Claim Penthouse Boilers 1 and 2) or new oil-fired boilers (Terminal Expansion Mechanical Room Boilers 1 and 2), and Portland Jetport shall be required to notify EPA and the Department of the change within 180 days of the effective date of the fuel switch. [40 C.F.R. § 63.11210(h) and 06-096 C.M.R. ch. 115, BPT]

C. Emergency Generators – Pre-2006

Portland Jetport operates the Central Penthouse Generator, the North Garage Generator, the Lighting Vault Generator, the Bag Claim Penthouse Generator, and the Maintenance Building Generator as emergency generators. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. The emergency generators have engines rated at 0.938 MMBtu/hr, 2.88 MMBtu/hr, 2.506 MMBtu/hr, 1.55 MMBtu/hr, and 0.89 MMBtu/hr, respectively. The Central Penthouse Generator, Lighting Vault Generator, and Bag Claim Penthouse Generator fire distillate fuel, the North Garage Generator fires natural gas, and the Maintenance Building Generator fires propane. The Maintenance Building Generator was manufactured in 1992, the Central Penthouse Generator was manufactured in 1996, and North Garage Generator was manufactured in 2002, and the Lighting Vault and Bag Claim Penthouse Generators were manufactured in 2004.

1. BPT Findings

The BPT emission limits for the Central Penthouse Generator, Lighting Vault Generator, and Bag Claim Penthouse Generator are based on the following:

PM/PM_{10}	- 0.12 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO_2	- 0.0015 lb/MMBtu, based on 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 10/96
CO	- 0.95 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
VOC	- 0.36 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
Visible Emissions	- 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the North Garage Generator and Maintenance Building Generator are based on the following:

PM/PM_{10}	- 0.05 lb/MMBtu from 06-096 C.M.R. ch. 115, BPT
SO_2	- 0.000588 lb/MMBtu based on AP-42, Table 3.3-2, dated 7/00
NO_x	- 4.08 lb/MMBtu based on AP-42, Table 3.2-2, dated 7/00
CO	- 0.317 lb/MMBtu based on AP-42, Table 3.2-2, dated 7/00
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, BPT

The BPT emission limits for the generators 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)
Central Penthouse Generator Distillate fuel	0.11	0.11	0.01	4.14	0.89	0.33
North Garage Generator Natural gas	0.14	0.14	0.01	6.54	10.71	0.09
Lighting Vault Generator Distillate fuel	0.30	0.30	0.01	11.05	2.38	0.88
Bag Claim Penthouse Generator Distillate fuel	0.19	0.19	0.01	6.84	1.47	0.54
Maintenance Building Generator Propane	0.04	0.04	0.01	2.02	3.31	0.03

Visible emissions from the Central Penthouse Generator, Lighting Vault Generator, and Bag Claim Penthouse Generator shall each not exceed 20% opacity on a six-minute block average basis.

Visible emissions from the North Garage Generator and Maintenance Building Generator shall each not exceed 10% opacity on a six-minute block average basis.

2. New Source Performance Standards (NSPS)

Due to the dates of manufacture of the Central Penthouse Generator, the Lighting Vault Generator, and the Bag Claim Penthouse Generator, the engines are not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE),* 40 C.F.R. Part 60, Subpart IIII since the units were manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

Due to the dates of manufacture of the North Garage Generator and the Maintenance Building Generator, the engines are not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Spark Ignition Internal Combustion Engines (SI ICE),* 40 C.F.R. Part 60, Subpart JJJJ since the units were manufactured prior to January 1, 2009. [40 C.F.R. § 60.4230]

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

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to the emergency engines listed above. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements. [40 C.F.R. § 63.6585]

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 63, Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 63, Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

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

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

(2) Non-Emergency Situation Operation

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

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.

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

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The Central Penthouse Generator, Lighting Vault Generator, Bag Claim Penthouse Generator, North Garage Generator, and Maintenance Building

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

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

(1) Operation and Maintenance Requirements

	Operating Limitations
Compression ignition (distillate fuel) units: -Central Penthouse Generator -Lighting Vault Generator -Bag Claim Penthouse Generator	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Spark ignition (natural gas, propane) units: -North Garage Generator -Maintenance Building Generator	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - Inspect spark plugs every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 C.F.R. § 63.6603(a) and Table 2(d)]

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Portland Jetport shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

(2) Optional Oil Analysis Program

Portland Jetport has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Portland Jetport must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

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

(4) Startup Idle and Startup Time Minimization Requirements
During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit for Maintenance and Testing
As emergency engines, the units shall each 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. § 63.6640(f)]

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

D. Emergency Generators – Post-2006

Portland Jetport operates the De-icing Pad Generator and New Terminal Generator as emergency generators. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. The De-icing Pad Generator and New Terminal Generator have engines rated at 4.69 MMBtu/hr and 7.49 MMBtu/hr, respectively. Both generators fire distillate fuel and were manufactured in 2010.

1. BPT Findings

The BPT emission limits for the generators are based on the following:

PM/PM_{10}	- 0.12 lb/MMBtu based on 06-096 C.M.R. ch. 103
SO_2	- 0.0015 lb/MMBtu based on combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO_x	- 3.2 lb/MMBtu based on AP-42, Table 3.4-1, dated 10/96
CO	- 0.85 lb/MMBtu based on AP-42, Table 3.4-1, dated 10/96
VOC	- 0.09 lb/MMBtu based on AP-42, Table 3.4-1, dated 10/96
Opacity	- 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the generators are the following:

Unit	Pollutant	lb/MMBtu
De-icing Pad Generator and New Terminal Generator [each]	PM	0.12

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
De-icing Pad Generator Distillate fuel	0.56	0.56	0.01	20.68	4.46	1.64
New Terminal Generator Distillate fuel	0.90	0.90	0.01	33.03	7.12	2.62

Visible emissions from the De-icing Pad Generator and New Terminal Generator shall each not exceed 20% opacity on a six-minute block average basis.

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

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to both the De-icing Pad Generator and the New Terminal Generator since the units were 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 units also meet 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. 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 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. §§ 60.4211(f) and 60.4219]

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

(1) Manufacturer Certification Requirement
The engines 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 the engines shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 C.F.R. § 60.4207(b)]

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

(4) Operation and Maintenance Requirements
The engines shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by Portland Jetport that are approved by the engine manufacturer. Portland Jetport may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

(5) Annual Time Limit for Maintenance and Testing
As emergency engines, the units shall each 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
Portland Jetport shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

E. Gasoline Storage Tank

The Gasoline Storage Tank is a 4,000 gallon capacity tank constructed in 1995 which is used to store gasoline. The Gasoline Storage Tank is located next to the maintenance building and is used to dispense gasoline to vehicles owned and operated by Portland Jetport.

1. *Gasoline Dispensing Facilities Vapor Control*, 06-096 C.M.R. ch. 118

The Gasoline Storage Tank is subject to *Gasoline Dispensing Facilities Vapor Control*, 06-096 C.M.R. ch. 118. The applicable requirements from 06-096 C.M.R. ch. 118 for the Gasoline Storage Tank are as follows:

a. The Gasoline Storage Tank shall have a submerged fill pipe that extends to within six inches of the bottom of the tank. [06-096 C.M.R. ch. 118]
b. Portland Jetport shall maintain records of monthly and annual gasoline throughput for the Gasoline Storage Tank. If the Gasoline Storage Tank ever exceeds the initial applicability threshold, Portland Jetport shall notify the Department of its change of applicability within 30 days. These records shall be maintained for a minimum of three years, shall be available for inspection during normal business hours, and shall be provided to the Department and/or EPA upon request. [06-096 C.M.R. ch. 118]

2. NESHAP: 40 C.F.R. Part 63, Subpart CCCCCC

The Gasoline Storage Tank is considered a storage tank at a gasoline dispensing facility and was constructed before November 9, 2006. Therefore, the Gasoline Storage Tank is considered an existing affected source subject to *NESHAP for Source Category: Gasoline Dispensing Facilities*, 40 C.F.R. Part 63, Subpart CCCCCC. The requirements of 40 C.F.R. Part 63, Subpart CCCCCC applicable to the Gasoline Storage Tank include, but are not necessarily limited to, the following:

a. Portland Jetport shall maintain records of monthly throughput for the Gasoline Storage Tank and shall provide them to the Administrator upon request. These records shall be maintained for a period of five years and shall be available within 24 hours of a request by the Administrator. [40 C.F.R. §§ 63.11111(e) and 63.11116(b)]
b. Portland Jetport shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
   (1) Minimize gasoline spills;
   (2) Clean up spills as expeditiously as possible;
   (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 C.F.R. § 63.11116(a)]

F. Parts Washer

The parts washer has a design capacity of 30 gallons. The parts washer is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130 and records shall be kept documenting compliance.

G. 06-096 C.M.R. ch. 137

Portland Jetport was previously subject to *Emission Statements*, 06-096 C.M.R. ch. 137. As part of this Air Emission License, the generators at the facility have been changed from being licensed to operate 500 hours/year total to being licensed to operate 100 hour/year for non-emergency purposes and having no limit for emergency usage. This change has caused the facility's licensed annual emissions to drop below the emissions reporting threshold contained in 06-096 C.M.R. ch. 137; therefore, Portland Jetport will no longer be subject to 06-096 C.M.R. ch. 137 as of the issuance of this Air Emission License.

H. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than six minutes in any one-hour period, during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined on a six-minute block average basis.

I. General Process Emissions

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

J. Annual Emissions

1. Total Annual Emissions

Portland Jetport shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on a limit of 98,000 gallons of distillate fuel per year for the boilers, no restriction on natural gas usage, and 100 hours/year for each of the emergency generators:

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
Boilers (Distillate fuel)	0.8	0.8	3.5	1.0	0.3	0.1
Boilers (Natural gas)	9.5	9.5	0.1	19.0	16.0	1.1
Generators	0.1	0.1	0.1	4.2	1.4	0.3
Total TPY	**10.4**	**10.4**	**3.7**	**24.2**	**17.7**	**1.5**

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans,* 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO_2e).

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

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

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

III. AMBIENT AIR QUALITY ANALYSIS

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-582-71-K-R/M 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 such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; 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 Part 70 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]

SPECIFIC CONDITIONS

(16) **Boilers**

A. Fuel

1. Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and Terminal Expansion Mechanical Room Boilers 1 and 2 are all licensed to fire distillate fuel. Total distillate fuel use for these units combined shall not exceed 98,000 gal/yr of distillate fuel, based on a calendar year total. [06-096 C.M.R. ch. 115, BPT]
2. Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, Terminal Expansion Mechanical Room Boilers 1 and 2, the North Garage Snow Melt Boiler, and the South Garage Snow Melt Boiler are all licensed to fire natural gas. [06-096 C.M.R. ch. 115, BPT]
3. Prior to July 1, 2018, the facility shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]
4. Beginning July 1, 2018, the facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Unit	Fuel	Pollutant	lb/MMBtu	Origin and Authority
Central Penthouse Boilers 1 and 2 [each]	Distillate fuel	PM	0.12	06-096 C.M.R. ch. 103(2)(B)(1)(a)
Central Penthouse Boilers 1 and 2 [each]	Natural gas	PM	0.05	06-096 C.M.R. ch. 115, BPT
Bag Claim Penthouse Boilers 1 and 2 [each]	Distillate fuel	PM	0.12	06-096 C.M.R. ch. 103(2)(B)(1)(a)
Bag Claim Penthouse Boilers 1 and 2 [each]	Natural gas	PM	0.05	06-096 C.M.R. ch. 115, BPT
Terminal Expansion Mechanical Room Boilers 1 and 2 [each]	Distillate fuel	PM	0.12	06-096 C.M.R. ch. 103(2)(B)(1)(a)
Terminal Expansion Mechanical Room Boilers 1 and 2 [each]	Natural gas	PM	0.05	06-096 C.M.R. ch. 115, BPT
North Garage Snow Melt Boiler	Natural gas	PM	0.05	06-096 C.M.R. ch. 115, BPT

Unit	Fuel	Pollutant	lb/MMBtu	Origin and Authority
South Garage Snow Melt Boiler	Natural gas	PM	0.05	06-096 C.M.R. ch. 115, BPT

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Central Penthouse Boiler 1 Distillate fuel	0.37	0.37	1.55	0.44	0.11	0.01
Central Penthouse Boiler 1 Natural gas	0.15	0.15	0.01	0.31	0.26	0.02
Central Penthouse Boiler 2 Distillate fuel	0.53	0.53	2.22	0.63	0.16	0.01
Central Penthouse Boiler 2 Natural gas	0.22	0.22	0.01	0.44	0.37	0.02
Bag Claim Penthouse Boilers 1 and 2 [each] Distillate fuel	0.46	0.46	1.91	0.54	0.14	0.01
Bag Claim Penthouse Boilers 1 and 2 [each] Natural gas	0.19	0.19	0.01	0.38	0.32	0.02
Terminal Expansion Mechanical Room Boilers 1 and 2 [each] Distillate fuel	0.35	0.35	1.46	0.41	0.10	0.01
Terminal Expansion Mechanical Room Boilers 1 and 2 [each] Natural gas	0.15	0.15	0.01	0.29	0.24	0.02
North Garage Snow Melt Boiler Natural gas	0.45	0.45	0.01	0.90	0.76	0.05
South Garage Snow Melt Boiler Natural gas	0.68	0.68	0.01	1.35	1.13	0.07

D. Visible Emissions

1. Visible emissions from Central Penthouse Boilers 1 and 2, Bag Claim Penthouse Boilers 1 and 2, and the combined stack for Terminal Expansion Mechanical Room Boilers 1 and 2 when firing distillate fuel shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
2. Visible emissions from the combined stack for Terminal Expansion Mechanical Room Boilers 1 and 2, North Garage Snow Melt Boiler, and South Garage Snow

Melt Boiler when firing natural gas shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

E. Portland Jetport shall maintain records of the yearly operating hours each boiler fires distillate fuel. If any individual boiler exceeds 48 hours firing distillate fuel for periodic testing, maintenance, or operator training during a calendar year, that boiler will become subject to all applicable requirements for 40 C.F.R. Part 63, Subpart JJJJJJ for existing oil-fired boilers (Central Penthouse Boilers 1 and 2 and Bag Claim Penthouse Boilers 1 and 2) or new oil-fired boilers (Terminal Expansion Mechanical Room Boilers 1 and 2), and Portland Jetport shall be required to notify EPA and the Department of the change within 180 days of the effective date of the fuel switch. [40 C.F.R. § 63.11210(h) and 06-096 C.M.R. ch. 115, BPT]

(17) **Emergency Generators – Pre-2006**

A. The Central Penthouse Generator, North Garage Generator, Lighting Vault Generator, Bag Claim Penthouse Generator, and Maintenance Building Generator shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]

B. The fuel sulfur content for the Central Penthouse Generator, Lighting Vault Generator, and Bag Claim Penthouse Generator shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 C.M.R. ch. 115, BPT]

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Central Penthouse Generator Distillate fuel	0.11	0.11	0.01	4.14	0.89	0.33
North Garage Generator Natural gas	0.14	0.14	0.01	6.54	10.71	0.09
Lighting Vault Generator Distillate fuel	0.30	0.30	0.01	11.05	2.38	0.88
Bag Claim Penthouse Generator Distillate fuel	0.19	0.19	0.01	6.84	1.47	0.54
Maintenance Building Generator Propane	0.04	0.04	0.01	2.02	3.31	0.03

D. Visible Emissions

1. Visible emissions from the Central Penthouse Generator, Lighting Vault Generator, and Bag Claim Penthouse Generator shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

2. Visible emissions from the North Garage Generator and the Maintenance Building Generator shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

E. The Central Penthouse Generator, North Garage Generator, Lighting Vault Generator, Bag Claim Penthouse Generator, and Maintenance Building Generator shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:

1. Portland Jetport shall meet the following operational limitations for the Central Penthouse Generator, Lighting Vault Generator, and Bag Claim Penthouse Generator:

   a. Change the oil and filter annually,
   b. Inspect the air cleaner annually and replace as necessary, and
   c. Inspect the hoses and belts annually and replace as necessary.

   Records shall be maintained documenting compliance with the operational limitations.

   [40 C.F.R. § 63.6603(a) and Table 2(d) and 06-096 C.M.R. ch. 115, BPT]

2. Portland Jetport shall meet the following operational limitations for the North Garage Generator and Maintenance Building Generator:

   a. Change the oil and filter annually,
   b. Inspect the spark plugs annually and replace as necessary, and
   c. Inspect the hoses and belts annually and replace as necessary.

   Records shall be maintained documenting compliance with the operational limitations.

   [40 C.F.R. § 63.6603(a) and Table 2(d) and 06-096 C.M.R. ch. 115, BPT]

3. Oil Analysis Program Option
   Portland Jetport has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Portland Jetport must keep records of the parameters that are analyzed as part of the program, the results of the analysis,

and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

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

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

   a. As emergency engines, the units shall each 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 to supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 115, BPT]

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

6. Operation and Maintenance
   The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Portland Jetport shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

7. Startup Idle and Startup Time Minimization
   During periods of startup, the facility must minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(18) **Emergency Generators – Post-2006**

A. The De-icing Pad Generator and New Terminal Generator shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
De-icing Pad Generator and New Terminal Generator [each]	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
De-icing Pad Generator Distillate fuel	0.56	0.56	0.01	20.68	4.46	1.64
New Terminal Generator Distillate fuel	0.90	0.90	0.01	33.03	7.12	2.62

D. Visible emissions from the De-icing Pad Generator and New Terminal Generator shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

E. The De-icing Pad Generator and New Terminal Generator shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:

1. Manufacturer Certification
   The engines 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 the engines shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [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 each engine. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing
   a. As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. 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. Portland Jetport shall keep records that include maintenance conducted on each engine and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance
The engines shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by Portland Jetport that are approved by the engine manufacturer. Portland Jetport may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

(19) **Gasoline Storage Tank**

A. The Gasoline Storage Tank shall have a submerged fill pipe that extends to within six inches of the bottom of the tank. [06-096 C.M.R. ch. 118]

B. Portland Jetport shall maintain records of monthly and annual gasoline throughput for the Gasoline Storage Tank. If the Gasoline Storage Tank ever exceeds the initial applicability threshold, Portland Jetport shall notify the Department of its change of applicability within 30 days. These records shall be maintained for a minimum of five years, shall be available for inspection during normal business hours, and shall be provided to the Department and/or EPA within 24 hours of a request by the Administrator. [06-096 C.M.R. ch. 118 and 40 C.F.R. §§ 63.11111(e) and 63.11116(b)]

C. Portland Jetport shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
1. Minimize gasoline spills;
2. Clean up spills as expeditiously as practicable;
3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 C.F.R. § 63.11116(a)]

(20) **Parts Washer**

The parts washer at Portland Jetport is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

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

B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
   1. Solvent cleaners using less than two liters (68 oz.) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
   2. Wipe cleaning; and,
   3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 C.M.R. ch. 130.

   1. Portland Jetport shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
      a. Waste solvent shall be collected and stored in closed containers.
      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. [06-096 C.M.R. ch. 130]

(21) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than six minutes in any one-hour period, during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(22) **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. 115, BPT]

(23) Portland Jetport 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).

DONE AND DATED IN AUGUSTA, MAINE THIS 16 DAY OF June , 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PAUL MERCER, 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: 4/11/2016
Date of application acceptance: 4/12/2016

Date filed with the Board of Environmental Protection:

Filed
JUN 16 2017
State of Maine
Board of Environmental Protection

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