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

City of Bangor **Bangor International Airport** **Penobscot County** **Bangor, Maine** **A-906-71-K-M**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Amendment #1**

Findings of Fact

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

I. Registration

A. Introduction

City of Bangor, Bangor International Airport (BGR) was issued Air Emission License A-906-71-J-R/A on March 17, 2026, for the operation of emission sources associated with the airport.

BGR has requested a minor revision to their license in order to remove Generator IAB-3 and make a correction in the labeling of the units in the table of Specific Condition (18)(D).

This license completes the processing of the application with the submission number of 604182 as assigned by the Department (accepted 09/15/2026).

The equipment addressed in this license amendment is located at 287 Godfrey Boulevard, Bangor, Maine.

B. Emission Equipment

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

Generator

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity	Fuel Type	Firing Rate (gal/hr)	Date of Manuf.
Generator IAB-3[A]	4.7	600 kW	Distillate Fuel	34.7	2025

[A] Removed from license.

C. Definitions

Distillate Fuel means the following:

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

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

D. Application Classification

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

This amendment will not increase licensed emissions of any pollutant. Therefore, this amendment is determined to be a minor revision and has been processed as such.

E. Facility Classification

With the annual fuel limit on the existing boilers and the operating hours restriction on the emergency generators and the snow melter, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because BGR is subject to license restrictions that keep facility emissions below major source thresholds for NO_x and CO; 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 was addressed in Air Emission License A-906-71-J-R/A (March 17, 2026). A BPT analysis is not required for this minor revision since it will result in no increases in emissions.

B. Generator IAB-3

Generator IAB-3 was removed from service at BGR on or around September 25, 2026. Generator DAB-3 and Generator IAB-4 were electrically reconfigured to provide power to cover the load of the removed generator.

C. Corrections in the Order, Specific Condition (18)(D)

The lb/hr emission limits applicable to Generator IAB-3 and Generator DAB-3 were inaccurately labeled in Specific Condition (18)(D) of the air emission license issued in March 2026: Limits for Generator IAB-3 were assigned to Generator DAB-3 and vice versa. In this amendment, Generator IAB-3 is removed from the table, and limits for Generator DAB-3 are accurately represented.

D. Annual Emissions

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

- 200 hours per year of operation of the snow melter and 100 hours per year each of non-emergency operation for Generators DAB-3, IAB-4, 99-1, TF-1 and BLDG 600-1; and
- Maximum heat input of 98,000 MMBtu in the 15 boilers addressed in this license, combined, on a calendar year basis.

Emissions from the boilers are calculates based on the worst-case scenario of firing 139,286 gallons of Jet A fuel (licensed maximum) and the balance (to total the equivalent of 98,000 MMBtu/year) of distillate fuel for PM, SO_2, and NO_x and firing natural gas for CO and VOC.

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

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

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC
Boilers	5.9	5.9	5.9	14.8	7.0	4.0	0.3
Snow Melter	0.1	0.1	0.1	-	0.1	-	-
Emergency Generators	0.2	0.2	0.2	-	5.9	1.5	0.3
Storage Tanks	-	-	-	-	-	-	2.3
Total TPY	**6.2**	**6.2**	**6.2**	**14.8**	**13.0**	**5.5**	**2.9**

Pollutant	Tons/year
Single HAP	7.9
Total HAP	19.9

Order

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:
- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-906-71-K-M subject to the conditions found in Air Emission License A-906-71-J-R/A and the following conditions.

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

Specific Conditions

The following shall replace Condition (18) of Air Emission License A-906-71-J-R/A:

(18) **Generators DAB-3, 99-1, TF-1, BLDG 600-1, and IAB-4**

A. Although 40 C.F.R. Part 63, Subpart IIII, limits non-emergency engine use to 100 hours per year with unlimited use during emergency situations, Generator IAB-4 shall be limited to 500 hours per year of operation on a 12-month rolling total basis, including operating hours during emergency situations.

If there are periods of extended outage such as a natural disaster or other similar event outside BGR's control, BGR may apply to the Department for a temporary variance to exempt specific time periods from this annual hour limit. The Department Commissioner may, without hearing, issue that variance for a period of time not to exceed 30 days if, in his/her judgement, the variance is necessary to avoid immediate threat to public health, safety, or general welfare or to protect critical infrastructure.

[06-096 C.M.R. ch. 169, § 4(B)(2)(c)]

Note: This condition is separate from and in addition to the record keeping requirement of Condition (18)(H)(4)(b), which requires the maintenance of calendar year total basis tracking the hours of operation. While the same operating hour log may be used for both requirements, 06-096 C.M.R. ch. 169 requires the tracking of hours on a 12-month rolling total basis.

B. The fuel sulfur content for Generators DAB-3, 99-1, TF-1, BLDG 600-1, and IAB-4 shall be limited to 0.0015% sulfur by weight. Compliance 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. [06-096 C.M.R. ch. 115, BPT]

C. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator DAB-3	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)
Generator 99-1	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)
Generator IAB-4	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

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

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 DAB-3	0.71	0.71	0.71	0.01	18.88	5.02	0.53
Generator 99-1	0.45	0.45	0.45	0.01	16.54	3.56	1.35
Generator TF-1	0.20	0.20	0.20	-	7.41	1.60	0.60
Generator BLDG 600-1	0.17	0.17	0.17	-	6.17	1.33	0.50
Generator IAB-4	2.55	2.55	2.55	0.03	67.97	18.05	1.91

E. Generator IAB-4 shall exhaust through a stack with a minimum height of 15 feet above ground level. [06-096 C.M.R. ch. 169, § 6(B)]

F. Visible Emissions

1. Visible emissions from Generators TF-1 and BLDG 600-1 shall each not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time BGR shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

   a. The duration of the startup shall not exceed 30 minutes per event;
   b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
   c. BGR shall keep records of the date, time, and duration of each startup.

   Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

   Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

   [06-096 C.M.R. ch. 101, § 4(A)(4)]

2. Visible emissions from Generators DAB-3, 99-1, and IAB-4 shall each not exceed 20% opacity on a six-minute block average basis.
   [06-096 C.M.R. ch. 101, § 4(A)(4)]

G. Generators TF-1 and BLDG 600-1 shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

1. BGR shall meet the following operational limitations for each of the compression ignition emergency engines:

   a. Change the oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;
   b. Inspect the air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and
   c. Inspect the hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, 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]

2. Oil Analysis Program Option
   BGR 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, BGR 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
   A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

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

   a. As emergency engines, the units shall each be limited to 100 hours per calendar year for maintenance checks and readiness testing. Up to 50 hours per calendar year of the 100 hours per calendar 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]

b. BGR 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)]

5. Operation and Maintenance
The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or BGR 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)]
BGR 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]

6. 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]

H. Generators DAB-3, 99-1, and IAB-4 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, BPT]

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). 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 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 per calendar year for maintenance checks and readiness testing. Up to 50 hours per calendar year of the 100 hours per calendar 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. BGR shall keep records that include 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)]

      Note: This condition is separate from and in addition to the record keeping requirement of Condition (18)(A), which requires the maintenance of 12-month rolling total basis tracking the hours of

operation. While the same operating hour log may be used for both requirements, Subpart IIII requires the tracking of hours on a calendar year total basis.

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

   BGR 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]

Done and Dated in Augusta, Maine this 9th day of NOVEMBER, 2026.

Department of Environmental Protection

BY:_____
for Melanie Loyzim, Commissioner

The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-906-71-J-R/A (issued 03/17/2026).

[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 8, 2026
Date of application acceptance: September 15, 2026

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