

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

DEPARTMENT ORDER

MCI International LLC Oxford County Andover, Maine A-51-71-P-A/T 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. <u>Introduction</u>

MCI International LLC (MCI) was issued Air Emission License A-51-71-O-R on July 29, 2014, for the operation of emission sources associated with their telecommunications facility.

MCI has requested an amendment to their license in order to add four new emergency generators, add one 25,000-gallon distillate fuel storage tank, and transfer the license from MCI Communication Services, Inc. to MCI International LLC.

The equipment addressed in this license amendment is located at 494 Roxbury Pond Rd, Andover, Maine.

B. Emission Equipment

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

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.	Stack #
Generator #3	9.85	1,000	Distillate fuel, 0.0015%	71.9	2021	2022	Gen3
Generator #4	9.85	1,000	Distillate fuel, 0.0015%	71.9	2021	2022	Gen4

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Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.	Stack #
Generator #5	9.85	1,000	Distillate fuel, 0.0015%	71.9	2021	2022	Gen5
Generator #6	9.85	1,000	Distillate fuel, 0.0015%	71.9	2021	2022	Gen6

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

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

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

Storage Tank

Equipment	Storage Capacity (Gallons)	Stored Material	Date of installation
Tank #5	25,000	distillate fuel	2022

C. <u>Definitions</u>

<u>Distillate Fuel</u> 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.

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.

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The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" 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:

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Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	0.3	0.6	0.3	100
PM_{10}	0.3	0.6	0.3	100
SO_2	0.1	0.1	0.0	100
NO _x	6.8	12.6	5.8	100
CO	1.7	3.4	1.7	100
VOC	0.2	0.4	0.2	50

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

E. Facility Classification

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

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

II. Transfer Requirements

A. Title, Right, or Interest

In their application, MCI submitted copies of a property deed demonstrating ownership of the facility. MCI has provided sufficient evidence of title, right, or interest in the facility for purposes of this air emission license.

B. Technical Capacity and Intent

MCI's acquisition of the facility is not expected to result in any significant change in the employees who currently operate the equipment and facilities and conduct activities relative to the air emission license. The facility's regulatory history with the Department demonstrates that the environmental personnel are competent in air pollution control. The information submitted in the application provides sufficient evidence that MCI has the technical capacity and intent to comply with their air emission license.

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C. Full Name and Address

The full name and address of the new owner is:

MCI International LLC 494 Roxbury Pond Road Andover, Maine 04216

D. Certification

MCI certifies that there will be no increase in air emissions beyond that provided for in the existing licenses, either in quantity or type.

III. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. Generators #3, #4, #5, and #6

MCI will operate Generators #3, #4, #5, and #6 as emergency generators. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. The emergency generators each have engines rated at 9.85 MMBtu/hr which fire distillate fuel. The emergency generators were manufactured in 2021.

1. BACT Findings

a. Particulate Matter (PM and PM₁₀)

PM emissions from distillate fuel-fired engines are generally controlled through proper operation and maintenance of the engines. Given the limited operating time of 100 hours per year of non-emergency operation, additional control for PM is not economically feasible.

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BACT for PM/PM₁₀ emissions from Generators #3, #4, #5, and #6 shall be proper operation and maintenance of the units and emission limits listed in the table below.

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b. Sulfur Dioxide (SO₂)

For emergency engines that fire distillate fuel and operate for only short periods of time, the use of a wet scrubber or other SO₂ add-on control methods are not economically feasible considering the minimal emissions due to the limited use of the engines. The most practical method for limiting SO₂ emissions of such engines is the use of low sulfur fuel, such as distillate fuel with a sulfur content no greater than 0.0015% by weight.

BACT for SO₂ emissions from Generators #3, #4, #5, and #6 shall be the use of distillate fuel with a sulfur content no greater than 0.0015% by weight and SO₂ emission limit listed in the table below.

c. Nitrogen Oxides (NO_x)

Potentially available control options for reducing NO_x emissions from distillate fuel-fired engines include combustion controls, selective catalytic reduction (SCR), non-selective catalytic reduction (NSCR), the use of Tier 4 certified engines, and the use of engines certified under 40 C.F.R. Part 60, Subpart IIII.

Combustion controls are implemented through design features such as electronic engine controls, injection systems, combustion chamber geometry, and turbocharging systems.

SCR and NSCR are both post-combustion NO_x reduction technologies. SCR injects ammonia to react with NO_x in the gas stream in the presence of a catalyst to form nitrogen and water. NSCR uses a catalyst to convert CO, NO_x , and hydrocarbons into carbon dioxide, nitrogen, and water without the use of an additional reagent, and requires strict air-to-fuel control to maintain high reduction effectiveness without increasing hydrocarbon emissions. For units of this size (9.85 MMBtu/hr) and usage (emergency engines), neither SCR nor NSCR are economically feasible considering the small size of the units and the minimal emissions due to the limited use of the engines.

Tier 4 Engine Generator Sets were considered; however, per Cummins (engine manufacturer), the estimated cost difference between the Tier 2 and Tier 4 Generator Sets is \$500,000 per unit. In addition, the footprint of a Tier 4 generator set is approximately 40% larger than that of the Tier 2, thus requiring significant site improvements to accommodate Tier 4 units. The total difference in cost for Tier 4 Generator Sets would have been approximately \$3,000,000. Given the limited expected runtime of the engines and minimal emissions expected from these generators, the use of Tier 4 engines is not considered economically feasible.

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BACT for NO_x emissions from Generators #3, #4, #5, and #6 shall be the use of good combustion controls, proper operation and maintenance of the units, using engines certified under 40 C.F.R. Part 60, Subpart IIII, and the NO_x emission limit listed in the table below.

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

CO and VOC emissions are a result of incomplete combustion caused by conditions such as insufficient residence time or limited oxygen availability. CO and VOC emissions from distillate fuel-fired engines are generally controlled through proper operation and maintenance. Oxidation catalysts have been used on larger engines to reduce CO and VOC emission levels in the exhaust, but, like SCR and NSCR, use of an oxidation catalyst on such small emergency engines with limited yearly use would not provide a significant environmental benefit and would not be economically feasible.

BACT for CO and VOC emissions from Generators #3, #4, #5, and #6 shall be proper operation and maintenance of the units, using engines certified under 40 C.F.R. Part 60, Subpart IIII, and emission limits listed in the table below.

2. BACT Emission Limits

The BACT emission limits for Generators #3, #4, #5, and #6 are based on the following:

PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103

SO₂ - 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 from AP-42 table 3.4-1 dated 10/96 CO - 0.85 lb/MMBtu from AP-42 table 3.4-1 dated 10/96 VOC - 0.09 lb/MMBtu from AP-42 table 3.4-1 dated 10/96

Visible - 06-096 C.M.R. ch. 115, BACT

Emissions

The BACT emission limits for Generators #3, #4, #5, and #6 are the following:

Unit	Pollutant	lb/MMBtu
Generator #3	PM	0.12
Generator #4	PM	0.12
Generator #5	PM	0.12
Generator #6	PM	0.12

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	PM	PM ₁₀	SO ₂	NOx	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Generator #3	1.18	1.18	0.02	31.52	8.37	0.89
Generator #4	1.18	1.18	0.02	31.52	8.37	0.89
Generator #5	1.18	1.18	0.02	31.52	8.37	0.89
Generator #6	1.18	1.18	0.02	31.52	8.37	0.89

Visible emissions from each of the emergency generators shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time MCI may comply with the following work practice standards in lieu of the numerical visible emissions standard.

- a. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.
- b. Operate the generators in accordance with the manufacturer's emission-related operating instructions.
- c. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
- d. Operate the generators, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

3. Stack Height

GEP stack height is defined in *Prohibited Dispersion Techniques*, 06-096 C.M.R. ch. 116, § 2(C). When a full GEP height stack is used, it is reasonably assured that emissions from a stack will not result in excessive concentrations at ground level as a result of aerodynamic effects from nearby structures or terrain features. When a stack less than full (100%) GEP height is used, it is assumed that surrounding structures or terrain have some interfering effect with the stack plume, with stacks less than 60% GEP height resulting in significant detrimental plume impacts. Therefore, the Department has determined that Generators #3, #4, #5, and #6 shall exhaust through a combined stack, or individual stacks that are at least 60% GEP height. Since the site's controlling structure (the nearby Building) is 18 feet tall, 60% GEP is calculated to be stacks that are at least 27 feet above ground level. The Department finds that use of

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stacks of at least this height are required to reasonably assure compliance with National Ambient Air Quality Standards.

4. 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 the emergency engines listed above 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 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 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.

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- (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).
[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. MCI may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

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(5) Annual Time Limit for Maintenance and Testing

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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

MCI 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)]

C. Total Generator Operating Hours

In order to verify that the total Potential to Emit (PTE) of NO_x does not exceed any additional regulatory thresholds, MCI shall track the operating hours of Generators #3-#6 on a monthly and 12-month rolling total basis.

If the sum of the operating hours for Generators #3-#6 combined exceeds 1,187 hours on a 12-month rolling total basis, MCI shall submit to the Department an application to amend their license to include the requirements of 06-096 C.M.R. ch. 137 within 60 days of the date the generators exceed this operating threshold.

If the sum of the operating hours for Generators #3-#6 combined exceeds 2,774 hours on a 12-month rolling total basis, MCI shall submit to the Department an air quality impact analysis pursuant to 06-096 C.M.R. ch. 115 within 90 days of the date the generators exceed this operating threshold. [06-096 C.M.R. ch. 115, § 7(B)(3)]

D. Fuel Storage Tank

MCI is adding a fuel storage tank with a capacity of 25,000 gallons to store distillate fuel. Tank #5 is an above ground horizontal storage tank which will supply fuel for Generators #3-#6.

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1. 40 CFR Part 60, Subpart Kb

Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 C.F.R. Part 60, Subpart Kb, applies to such storage vessels with a capacity greater than or equal to 75 cubic meters (m³). However, the material stored in this tank has a true vapor pressure less than the applicable values identified in Subpart Kb for a tank of this size; therefore, Tank #5 is not subject to Subpart Kb. [40 C.F.R. § 60.110b(b)]

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The previously licensed Tank #1 has the same applicability requirements for Subpart Kb as described above for Tank #5; therefore, Subpart Kb requirements for Tank #1 were included in error in Air Emission License A-51-71-O-R and are removed in this license amendment.

2. 06-096 C.M.R. ch. 111, Petroleum Liquid Storage Vapor Control

Tank #5 is not subject to this rule, as its capacity is below the minimum tank size applicability threshold of 39,000 gallons. [06-096 C.M.R. ch. 111 (1)(B) and (C)]

E. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- Firing 50,000 gal/yr distillate fuel in the boilers;
- Operating the generators for 100 hrs/yr each.

Please note, this information provides the basis for fee calculation <u>only</u> and should not be construed to represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

	T					
	PM	PM_{10}	SO_2	NO_x	CO	VOC
Boilers #1 and #2	0.05	0.05	0.01	0.50	0.13	0.01
Generator #1	0.11	0.11	0.01	2.89	0.77	0.08
Generator #2	0.11	0.11	0.01	2.89	0.77	0.08
Generator #3	0.06	0.06	0.01	1.58	0.42	0.04
Generator #4	0.06	0.06	0.01	1.58	0.42	0.04

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Generator #5	0.06	0.06	0.01	1.58	0.42	0.04
Generator #6	0.06	0.06	0.01	1.58	0.42	0.04
Total TPY	0.6	0.6	0.1	12.6	3.4	0.4

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Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

IV. 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 amendment.

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.

Based on the above, the Department concludes that MCI International LLC has the capacity to satisfy all applicable statutory criteria and hereby APPROVES the transfer of Air Emission License A-51-71-O-R, from MCI Communication Services, Inc. to MCI International LLC, subject to all conditions attached to it.

The Department hereby grants Air Emission License Amendment A-51-71-P-A/T subject to the conditions found in Air Emission License A-51-71-O-R and the following conditions.

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<u>Severability</u>. 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.

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SPECIFIC CONDITIONS

Specific Condition (18) of Air Emission License A-51-71-O-R is hereby removed.

The following is a new condition of Air Emission License A-51-71-O-R.

(22) Generators #3, #4, #5, and #6

- A. Generators #3, #4, #5, and #6 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, BACT]
- B. Generators #3, #4, #5, and #6 shall exhaust through a vertical stack, or stacks, which are at least 27 feet above ground level. [06-096 C.M.R. ch. 115, BACT]
- C. Emissions from Generators #3, #4, #5, and #6 shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #3	PM	0.12	06-096 C.M.R. ch. 103,
			$\S(2)(B)(1)(a)$
Generator #4	PM	0.12	06-096 C.M.R. ch. 103,
			$\S(2)(B)(1)(a)$
Generator #5	PM	0.12	06-096 C.M.R. ch. 103,
			$\S(2)(B)(1)(a)$
Generator #6	PM	0.12	06-096 C.M.R. ch. 103,
			§ (2)(B)(1)(a)

D. Emissions from Generators #3, #4, #5, and #6 shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

	PM	PM_{10}	SO ₂	NO _x	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Generator #3	1.18	1.18	0.02	31.52	8.37	0.89
Generator #4	1.18	1.18	0.02	31.52	8.37	0.89
Generator #5	1.18	1.18	0.02	31.52	8.37	0.89
Generator #6	1.18	1.18	0.02	31.52	8.37	0.89

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E. Visible Emissions

Visible emissions from each of the emergency generators shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time MCI may comply with the following work practice standards in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(A)(4)]

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- 1. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.
- 2. Operate the generators in accordance with the manufacturer's emission-related operating instructions.
- 3. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
- 4. Operate the generators, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

F. Total Generator Operating Hours

- 1. MCI shall track the operating hours of Generators #3-#6 on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
- 2. If the sum of the operating hours for Generators #3-#6 combined exceeds 1,187 hours on a 12-month rolling total basis, MCI shall submit to the Department an application to amend their license to include the requirements of 06-096 C.M.R. ch. 137 within 60 days of the date the generators exceed this operating threshold. [06-096 C.M.R. ch. 137 (B)]
- 3. If the sum of the operating hours for Generators #3-#6 combined exceeds 2,774 hours on a 12-month rolling total basis, MCI shall submit to the Department an air quality impact analysis pursuant to 06-096 C.M.R. ch. 115 within 90 days of the date the generators exceed this operating threshold. [06-096 C.M.R. ch. 115, § 7(B)(3)]

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G. Generators #3, #4, #5, and #6 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]

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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 tank containing the fuel to be fired.

[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. 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. MCI 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)]

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5. Operation and Maintenance

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

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DONE AND DATED IN AUGUSTA, MAINE THIS 3rd DAY OF JANUARY, 2022.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

MELANIE LOYZIM, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-51-71-O-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 5/26/21

Date of application acceptance: 6/8/21

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

FILED

JAN 03, 2022

State of Maine Board of Environmental Protection