



DEPARTMENT ORDER

Department of Veterans Affairs
Medical and Regional Office Center
Kennebec County
Augusta, Maine
A-372-71-S-A

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

The Department of Veterans Affairs Medical and Regional Office Center (DVA) was issued Air Emission License A-372-71-R-R/A on June 8, 2018, for the operation of emission sources associated with their medical and regional office center.

DVA has requested an amendment to their air emission license in order to add two new emergency generators, replace two obsolete generators and one fire pump with new ones, and to remove two ethylene oxide sterilizers that are no longer on site.

The equipment addressed in this license amendment is located at #1 VA Center in Augusta, Maine.

B. Emission Equipment

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

New Stationary Engines

<u>Equipment</u>	<u>Max. Input Capacity (MMBtu/hr)</u>	<u>Rated Output Capacity</u>	<u>Fuel Type, % sulfur</u>	<u>Firing Rate (gal/hr)</u>	<u>Date of Manuf.</u>	<u>Date of Install.</u>
Generator #1	2.5	244 kW	Distillate fuel, 0.0015%	18.7	2014	2017
Generator #5	4.9	500 kW	Distillate fuel, 0.0015%	35.9	2018	2019

<u>Equipment</u>	<u>Max. Input Capacity (MMBtu/hr)</u>	<u>Rated Output Capacity</u>	<u>Fuel Type, % sulfur</u>	<u>Firing Rate (gal/hr)</u>	<u>Date of Manuf.</u>	<u>Date of Install.</u>
Generator #10	8.0	800 kW	Distillate fuel, 0.0015%	57.3	2019	2019
Generator #11	3.9	463 kW	Distillate fuel, 0.0015%	27.9	2019	2019
Fire Pump (A)	1.2	64 HP	Distillate fuel, 0.0015%	9.0	2018	2019

Obsolete Stationary Engines Being Removed

<u>Equipment</u>	<u>Max. Input Capacity (MMBtu/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Firing Rate (gal/hr)</u>	<u>Date of Manuf.</u>	<u>Date of Install.</u>
Generator #1	1.6	Distillate fuel, 0.0015%	11.7	1996	1996
Generator #5	2.62	Distillate fuel, 0.0015%	18.7	2014	2017
Fire Pump (A)	0.85	Distillate fuel, 0.0015%	6.2	2002	2002

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

C. Ethylene Oxide Sterilizers

DVA recently dismantled and removed two Steris Amsco Eagle Model 3017 ethylene oxide (EO) sterilizer units from their facility that were subject to conditions in their current air emission license. Per DVA’s request, this amendment removes these two EO sterilizer units from their license.

D. 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.

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

E. Application Classification

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

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:

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	14.9	15.0	0.1	100
PM ₁₀	14.9	15.0	0.1	100
SO ₂	67.9	67.9	0.0	100
NO _x	60.7	63.6	2.9	100
CO	44.4	45.1	0.7	100
VOC	3.2	3.4	0.2	50

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

F. Facility Classification

With the annual fuel limit on Boilers #1, #2, and #3, the annual heat input limit on Boiler #4, and the operating hours restriction on the emergency generators and fire pump, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because DVA 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. 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. Emergency Generators #1, #5, #10, #11 and Fire Pump (A)

DVA has requested the addition of two new emergency generators to their license, along with the replacement of two obsolete emergency generators with new ones. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. Emergency Generators #1 and #5 are replacing obsolete generators that had the same names. The new Generator #1 is driven by a distillate fuel-fired engine that was manufactured in 2014 and has a heat input rating of 2.5 MMBtu/hr. The new Generator #5 is driven by a distillate fuel-fired engine that was manufactured in 2018 and has a heat input rating of 4.9 MMBtu/hr. Generators #10 and #11 have distillate fuel-fired engines that are rated at 8.0 MMBtu/hr and 3.9 MMBtu/hr, respectively. Generator #10 and Generator #11 were both manufactured in 2019.

DVA has also requested that this amendment include the replacement of obsolete Fire Pump (A) with a new one having the same name. The new Fire Pump (A) has an engine rated at 1.2 MMBtu/hr, fires distillate fuel, and was manufactured in 2018.

1. BACT Analysis

The BACT emission limits for the four new emergency generators and one new fire pump are based on the following analysis:

a. Particulate Matter (PM / PM₁₀):

Particulate matter emissions from distillate fuel-fired engines are generally controlled through proper operation and maintenance. Additionally, the emergency engines for the four new generators and the one new fire pump at DVA are subject to 40 C.F.R. Part 60, Subpart IIII - *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, which requires them to meet EPA emission standards for emergency stationary engines. Therefore, BACT for PM and PM₁₀ emissions from the five emergency engines used to drive these new generators and fire pump shall be the use of emergency stationary engines certified to meet the emission standards as required by 40 C.F.R. § 60.4205(b)(2) for the generators and by § 60.4205 (d) for the fire pump, along with their proper operation and maintenance.

b. Sulfur Dioxide (SO₂):

For emergency engines that fire distillate fuel and operate for less than 100 hours per year in a non-emergency capacity, the use of wet scrubbers or other SO₂ add-on control methods would not be economically feasible considering the minimal emissions that would be generated by the limited use engines. The most practical method for limiting SO₂ emissions is the use of low sulfur fuel, such as distillate fuel having a sulfur content of no greater than 0.0015% by weight, in conjunction with the installation of emergency stationary engines certified to meet the emission standards as required by 40 C.F.R. § 60.4205(b)(2) for the generators and by § 60.4205 (d) for the fire pump. The Department has determined that this method shall represent BACT for the five new emergency engines at DVA.

c. Nitrogen Oxides (NO_x):

Potentially available control options for reducing NO_x emissions from distillate fuel-fired emergency engines include combustion controls, selective catalytic reduction (SCR), and non-selective catalytic reduction (NSCR). Combustion controls are typically implemented through design features such as electronic engine controls, injection systems, combustion chamber geometry, and turbocharging systems. Most new engines are designed with these features as standard equipment.

SCR is a post-combustion NO_x reduction technology that uses ammonia to react with NO_x in the gas stream in the presence of a catalyst to form nitrogen and water. SCR has not been a demonstrated NO_x control technology for emergency engines and is not technically feasible for engines requiring quick start-ups and short operating periods. Additionally, SCR would not be economically feasible considering the minimal emissions generated by the emergency engines within their operating hour restrictions, and the insignificant NO_x reduction that would be expected if SCR were installed.

NSCR is another post-combustion NO_x reduction technology that uses a catalyst to convert CO, NO_x and hydrocarbons into carbon dioxide, nitrogen and water without the use of an additional reagent. Engines operating with NSCR require strict air-to-fuel ratio control to maintain high reduction effectiveness without increasing hydrocarbon emissions. To achieve effective NO_x reduction performance with NSCR, the engines may need to run with a richer fuel mixture than normal, which means that they would have to run using less air per unit of fuel being combusted than they otherwise would. NSCR would not be economically feasible considering the minimal emissions generated by the emergency engines within their operating hour restrictions, and the insignificant NO_x reduction that would be expected if NSCR were installed. NSCR would not be technically feasible because engines that fire distillate fuel inherently operate lean and therefore have exhaust oxygen levels higher than those required to effectively use NSCR.

Therefore, BACT for NO_x emissions from these five emergency engines shall be the installation of emergency stationary engines certified to meet the emission standards as required by 40 C.F.R. § 60.4205(b)(2) for the generators and by § 60.4205 (d) for the fire pump, in conjunction with the use of good combustion controls, and the proper operation and maintenance of the emergency stationary engines.

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

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

BACT for CO and VOC emissions from these five emergency engines shall be the installation of emergency stationary engines certified to meet the emission standards as required by 40 C.F.R. § 60.4205(b)(2) for the generators and by § 60.4205 (d) for the fire pump, in conjunction with the proper operation and maintenance of the units.

2. BACT Findings

a. Generator #1 and Fire Pump (A)

The BACT emission limits for Generator #1 and Fire Pump (A) are based on the following:

PM/PM ₁₀	- 0.31 lb/MMBtu, from AP-42, Table 3.3-1, dated 10/96
SO ₂	- combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO _x	- 4.41 lb/MMBtu, from AP-42, Table 3.3-1, dated 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. 101

b. Generators #5 and #11

The BACT emission limits for Generators #5 and #11 are based on the following:

PM/PM ₁₀	- 0.12 lb/MMBtu, from 06-096 C.M.R. ch. 103(B)(1)(a)
SO ₂	- combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO _x	- 4.41 lb/MMBtu, from AP-42, Table 3.3-1, dated 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. 101

c. Generator #10

The BACT emission limits for Generator #10 are based on the following:

PM/PM ₁₀	- 0.12 lb/MMBtu, from 06-096 C.M.R. ch. 103(B)(1)(a)
SO ₂	- 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 Emissions	- 06-096 C.M.R. ch. 101

d. The BACT emission limits for the generators and fire pump are the following:

Unit	Pollutant	lb/MMBtu
Generator #5	PM	0.12
Generator #10		
Generator #11		

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.78	0.004	11.03	2.38	0.90	0.78
Generator #5	0.59	0.007	21.61	4.66	1.76	0.59
Generator #10	0.96	0.012	25.60	6.80	0.72	0.96
Generator #11	0.47	0.006	17.20	3.71	1.40	0.47
Fire Pump (A)	0.37	0.002	5.29	1.14	0.43	0.37

Visible emissions from each of the engines for the four emergency generators and the fire pump shall not exceed 20% opacity on a six-minute block average basis.

3. 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 III requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart III, 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 III, 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 III 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. DVA 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 III for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping

DVA 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. 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 a combined total of 1,800,000 gal/yr of distillate fuel in Boilers #1, #2, and #3;
- An annual heat input limit of 311,570 MMBtu/yr for Boiler #4; and
- A non-emergency operating hour restriction of 100 hours/yr for each of the licensed emergency engines.

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

**Total Licensed Annual Emissions for the Facility
 Tons/year**

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler #1, #2, and #3	10.1	10.1	63.9	18.0	4.5	0.3
Boiler #4	4.7	4.7	3.9	39.0	39.0	2.7
Generator #1	0.04	0.04	negl.	0.55	0.12	0.05
Generator #4	0.04	0.04	0.01	0.99	0.26	0.03
Generator #5	0.03	0.03	negl.	1.08	0.23	0.09
Generator #7	0.01	0.01	0.01	0.26	0.06	0.02
Generator #8	0.03	0.03	0.01	0.75	0.20	0.02
Generator #9	0.01	0.01	0.01	0.54	0.12	0.04
Generator #10	0.05	0.05	negl.	1.28	0.34	0.04
Generator #11	0.02	0.02	negl.	0.86	0.19	0.07
Fire Pump (A)	0.02	0.02	negl.	0.26	0.06	0.02
Total TPY	15.0	15.0	67.9	63.6	45.1	3.4

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM ₁₀	25
SO ₂	50
NO _x	50
CO	250

The total annual licensed emissions for the facility are above at least one of the emission levels contained in the table above; however, after taking into consideration the following factors:

- similarity with other licensed sources based on size, emissions, and local topography;
- location, including proximity to other sources, complex terrain and Class I areas; and
- background air quality data available in or representative of the local area,

The Department has determined that an ambient air quality impact analysis is not required for the facility and that Ambient Air Quality Standards (AAQS) will not be exceeded.

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-372-71-S-A subject to the conditions found in Air Emission License A-372-71-R-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 specific condition shall replace Specific Condition (17) in Air Emission License A-372-71-R-R/A (June 8, 2018):

(17) Generators #4, #7, and #8

- A. Emergency Generators #4, #7, and #8 shall 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. DVA shall keep records that include maintenance conducted on each of 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 the engine was in operation during each time. [06-096 C.M.R. ch. 115, BPT]
- C. The fuel sulfur content for Generators #4, #7 and #8 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]
- D. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Generator #4	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)
Generator #8			

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

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Generator #4 6.20 MMBtu/hr	0.74	0.74	0.01	19.84	5.27	0.56
Generator #7 1.20 MMBtu/hr	0.14	0.14	0.01	5.29	1.14	0.43
Generator #8 4.67 MMBtu/hr	0.56	0.56	0.01	14.94	3.97	0.42

F. Visible Emissions

Visible emissions from each of the distillate fuel-fired generators shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

G. Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

The following specific condition shall replace Specific Condition (18) in Air Emission License A-372-71-R-R/A (June 8, 2018):

(18) Generators #1, #5, #9, #10, #11 and Fire Pump (A)

A. Emergency Generators #1, #5, #9, #10, #11 and Fire Pump (A) shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT and BACT]

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

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 2.5 MMBtu	0.78	0.004	11.03	2.38	0.90	0.78
Generator #5 4.9 MMBtu/hr	0.59	0.007	21.61	4.66	1.76	0.59
Generator #9 2.44 MMBtu/hr	0.29	0.29	0.01	10.76	2.32	0.88
Generator #10 8.0 MMBtu/hr	0.96	0.012	25.60	6.80	0.72	0.96
Generator #11 3.9 MMBtu/hr	0.47	0.006	17.20	3.71	1.40	0.47
Fire Pump (A) 1.2 MMBtu/hr	0.37	0.002	5.29	1.14	0.43	0.37

C. Visible Emissions

Visible emissions from Generators #1, #5, #9, #10, #11, and Fire Pump (A) shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT and BACT]

D. Emergency Generators #1, #5, #9, #10, #11, and Fire Pump (A) shall each meet the applicable requirements of 40 C.F.R. Part 60, Subpart III, including the following: [incorporated under 06-096 C.M.R. ch. 115, BPT and BACT]

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-Resetable 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]

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

(19) Specific Condition (19) of Air Emission License A-372-71-R-R/A (June 8, 2018) is hereby removed.

DONE AND DATED IN AUGUSTA, MAINE THIS 7th DAY OF JULY, 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
GERALD D. REID, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-372-71-R-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: September 23, 2019

Date of application acceptance: September 25, 2019

Date filed with the Board of Environmental Protection:

This Order prepared by Patric J. Sherman, Bureau of Air Quality.

FILED
JUL 07, 2020
State of Maine
Board of Environmental Protection