



DEPARTMENT ORDER

**Grimmel Ind., Inc.
Sagadahoc County
Topsham, Maine
A-760-71-D-R/A (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal/Amendment**

FINDINGS OF FACT

After review of the air emission license amendment and renewal 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

Grimmel Ind., Inc. (Grimmel) has applied to renew their Air Emission License for the operation of emission sources associated with their metal recycling facility. Grimmel has also requested an amendment to their license in order to add a second generator.

The equipment addressed in this license is located at 80 Pejepscot Village, Topsham, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Generators

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (HP)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Generator #1	8.9	1269.1	Distillate fuel, 0.0015%	65.9	1992	1992
Generator #2*	4.1	486.5	Distillate fuel, 0.0015%	29.1	2003	2005

*New to the license

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.

Portable Engine. For the purposes of this license, *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.

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.

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	0.6	0.6	0	100
PM ₁₀	0.6	0.6	0	100
SO ₂	0.1	0.1	0	100
NO _x	23.9	22.7	-1.2	100
CO	1.9	4.9	3.0	100
VOC	0.5	1.8	1.3	50
CO ₂ e	<100,000	<100,000	-	100,000

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

In addition, the license is considered to be a renewal of currently licensed emission units 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 fuel limit on Generators #1 and #2 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 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.

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. Generator #1

Generator #1 has a maximum capacity of 8.9 MMBtu/hr, firing distillate fuel, and was manufactured in 1992. The combined fuel usage of both Generators #1 and #2 shall be limited to 75,000 gallons/year on a 12-month rolling total basis of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). As of the time this license was written, Generator #1 is not in use. Should Grimmel elect to resume operation of Generator #1, the following requirements shall apply.

1. BPT Findings

The BPT emission limits for Generator #1 were based on the following:

Generator #1

- 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 - 4.65 lb/MMBtu from manufacturer's data
- CO - 0.36 lb/MMBtu from manufacturer's data
- VOC - 0.1 lb/MMBtu from manufacturer's data
- Visible Emissions - 06-096 C.M.R. ch. 115, BPT

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

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Generator #1	PM	0.12

<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 #1 (8.9 MMBtu/hr) Distillate fuel	1.1	1.1	0.01	41.4	3.2	0.9

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

2. New Source Performance Standards

Generator #1 was manufactured prior to April 1, 2006. Therefore, Generator #1 is not subject to *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart IIII. [40 C.F.R. § 60.4200]

3. National Emission Standards for Hazardous Air Pollutants

Generator #1 is considered an existing, non-emergency, stationary compression ignition reciprocating internal combustion engine (RICE) at an area source of HAP emissions, and is therefore subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ.

Per 40 C.F.R. Part 63, Subpart ZZZZ, Generator #1 is subject to emission limits for CO. Grimmel shall comply with the option to meet the 23 ppmvd CO at 15% O₂

emission limit or to reduce CO emissions by 70% or more through the use of an oxidation catalyst. Grimmel shall demonstrate compliance either through the use of a continuous parameter monitoring system (CPMS) or a continuous emission monitoring system (CEMS).

The requirements of 40 C.F.R. Part 63, Subpart ZZZZ for Generator #1 include, but are not necessarily limited to, the following:

a. Operation Requirements

	Operating Limitations
Non-Emergency, non-black start CI stationary RICE >500 HP	<ul style="list-style-type: none">- Limit concentration of CO in the exhaust to 23 ppmvd at 15% O₂ <u>or</u> reduce CO emissions by 70% or more (Table 2d);- Minimize the engine's time spent at idle and minimize the engine's startup time at startup 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 apply (Table 2d);- Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test (Table 2b); and- Maintain the temperature of the exhaust so that the catalyst inlet temperature is 450°F – 1350°F. (Table 2b)

b. Crankcase Filtration

Grimmel shall either install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. [40 C.F.R. § 63.6625(g)]

c. Continuous Monitoring System

Grimmel shall install and operate either a continuous parameter monitoring system (CPMS) or continuous emission monitoring system (CEMS) according to the following requirements:

(1) Continuous Parameter Monitoring System

If Grimmel elects to demonstrate compliance through a CPMS the following requirements apply:

- (i) Grimmel shall prepare a site-specific monitoring plan to address the requirements outlined in 40 C.F.R. § 63.6625(b)(1).

- (ii) Grimmel shall install, operate, and maintain the CPMS on Generator #1.
 - (iii) The CPMS shall be continuously operated in accordance with the site-specific monitoring plan at all times that Generator #1 is operating except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities.
 - (iv) The CPMS must collect data at least once every 15 minutes.
 - (v) For CPMS measuring temperature range, the temperature sensor must have a minimum tolerance of 5° F or 1% of measurement range, whichever is larger.
 - (vi) Grimmel shall conduct a CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
- [40 C.F.R. § 63.6625(b), § 63.6635, and Table 6]

(2) Continuous Emission Monitoring System

If Grimmel elects to demonstrate compliance through a CEMS the following requirements apply:

- (i) Grimmel shall install, operate, and maintain a CEMS according to applicable performance specifications of 40 C.F.R. Part 60, appendix B.
- (ii) Grimmel shall conduct an initial performance evaluation and annual relative accuracy test audit (RATA) of the CEMS according to 40 C.F.R. § 63.8 and 40 C.F.R. Part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 C.F.R. part 60, appendix F, procedure 1.
- (iii) The CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15 minute period.
- (iv) CEMS data must be reduced as specified in 40 C.F.R. § 63.8(g)(2) and recorded in parts per million at 15% oxygen or the equivalent CO₂ concentration.

[40 C.F.R. § 63.6625(a)]

d. Performance Tests

- (1) Grimmel shall conduct an initial performance test in accordance with Table 4 of Subpart ZZZZ upon startup of Generator #1. [60 C.F.R. § 63.6612(a)]
- (2) Grimmel shall conduct three separate test runs for each performance test. Each test run must be at least one hour, unless otherwise specified. [40 C.F.R. § 63.6620(d)]
- (3) The engine percent load during a performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination shall be included in the notification of compliance status. The report shall contain the information specified in 40 C.F.R. § 63.6620(i).

- (4) Grimmel shall conduct additional performance tests every 8,760 hours of operation or three years, whichever comes first. [40 C.F.R. § 63.6615 and Table 3]
 - (5) Grimmel is not required to start Generator #1 solely to conduct a performance test. [40 C.F.R. § 63.6620(b)]
- e. **Ultra-Low Sulfur Fuel Requirement**
The fuel fired in Generator #1 shall not exceed 15 ppm sulfur (0.0015% sulfur) by weight. [40 C.F.R. § 63.6604(a)]
- f. **General Requirement to Minimize Emissions**
At all times Grimmel shall operate and maintain Generator #1, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 C.F.R. § 63.6605(b)]
- g. **Reporting**
Grimmel shall submit to EPA all reports required by Subpart ZZZZ including, but not limited to, the following:
- (1) Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. § 63.6645(g)]
 - (2) Notification of Compliance Status within 60 days of completion of the initial compliance test. [40 C.F.R. § 63.6645(h)]
 - (3) Semiannual Compliance Reports. [40 C.F.R. § 63.6650 and Table 7]
- h. **Recordkeeping**
Grimmel shall keep all records required by Subpart ZZZZ including, but not limited to, the following:
- (1) A copy of each notification and report that was submitted to comply with Subpart ZZZZ, including all supporting documentation.
 - (2) Records of the occurrence and duration of each malfunction of the engine, pollution control equipment, or monitoring equipment.
 - (3) Records of performance tests and performance evaluations.
 - (4) Records of all required maintenance performed on air pollution control and monitoring equipment.
 - (5) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions taken to restore normal operation.
 - (6) Records that show continuous compliance with each applicable emission or operating limitation.
 - (7) Records of maintenance conducted.
 - (8) Records must be kept readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).
[40 C.F.R. § 63.6655 and § 63.6660]

C. Generator #2

Generator #2 is a portable engine with a maximum capacity of 4.1 MMBtu/hr, firing distillate fuel. It was manufactured in 2003. The combined fuel usage of both Generators #1 and #2 shall be limited to 75,000 gallons/year on a 12-month rolling total basis of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight).

4. BACT Findings

The BACT emission limits for Generator #2 were based on the following:

Generator #2

- PM, PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 115, BACT
- SO₂ - 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 - 0.35 lb/MMBtu from AP-42 table 3.3-1 dated 10/96
- Visible Emissions - 06-096 C.M.R. ch. 115, BACT

The BACT/BPT emission limits for Generator #2 are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Generator #2	PM	0.12

<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 #2 (4.1 MMBtu/hr) Distillate fuel	0.5	0.5	0.01	18.1	3.9	1.4

Visible emissions from Generator #2 shall not exceed 20% opacity on a six-minute block average basis.

5. New Source Performance Standards

Generator #2 is considered a non-road engine, as opposed to a stationary engine, since Generator #2 is portable and will be moved to various sites. Therefore, Generator #2 is not subject to *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart III. [40 C.F.R. § 60.4200]

6. National Emission Standards for Hazardous Air Pollutants

Generator #2 is considered a non-road engine, as opposed to a stationary engine, since Generator #2 is portable and will be moved to various sites. Therefore, Generator #2 is not subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. The definition in 40 C.F.R. § 1068.30 states that a non-road engine is an internal combustion engine that meets certain criteria, including: “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.” 40 C.F.R. § 1068.30 further states that an engine is not a non-road engine if it remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. An engine located at a seasonal source (a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year) is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. [40 C.F.R. § 63.6585]

D. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

E. General Process Emissions

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

F. Annual Emissions

1. Total Annual Emissions

Grimmel shall be restricted to the following annual emissions, based on a 12-month rolling total basis. The tons per year limits were calculated based on 75,000 gal/yr distillate fuel.

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

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Generators #1 and #2	0.6	0.6	0.1	22.7	4.9	1.8
Total TPY	0.6	0.6	0.1	22.7	4.9	1.8

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 (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility’s fuel use limit;
- 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-760-71-D-R/A subject to the following conditions.

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

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to 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) **Generators #1 and #2**

A. Fuel Use

Total annual fuel use for Generators #1 and #2 shall not exceed 75,000 gals/yr of distillate fuel with a maximum sulfur content no greater than 15 ppm (0.0015% by weight), based on a 12-month rolling total. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered.
 [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Generator #1	PM	0.12	06-096 C.M.R. ch. 115, BPT
Generator #2	PM	0.12	06-096 C.M.R. ch. 115, BACT

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

<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 #1 (8.9 MMBtu/hr) distillate fuel	1.1	1.1	0.01	41.4	3.2	0.9
Generator #2 (4.1 MMBtu/hr) distillate fuel	0.5	0.5	0.01	18.1	3.9	1.4

D. 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/BACT]

E. At the time that operation of Generator #1 is resumed, it 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. Grimmel shall meet the following operational limitations for Generator #1:

- a. Except during periods of startup, limit the concentration of CO in the exhaust to 23 ppmvd at 15% O₂ or reduce CO emissions by 70% or more.
- b. Except during periods of startup, maintain the catalyst so that the pressure drop across the catalyst does not change by more than two inches of water from the pressure drop across the catalyst that was measured during the initial performance test.
- c. Except during periods of startup, maintain the temperature of the exhaust so that the catalyst inlet temperature is 450° F – 1350° F.
- d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup 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 apply.

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

2. Crankcase Filtration

Grimmel shall either install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. [40 C.F.R. § 63.6625(g) and 06-096 C.M.R. ch. 115, BPT]

3. Continuous Monitoring System

Grimmel shall install and operate either a continuous parameter monitoring system (CPMS) or continuous emission monitoring system (CEMS) according to the following requirements:

a. Continuous Parameter Monitoring System (CPMS)

If Grimmel elects to demonstrate compliance through a CPMS the following requirements apply:

- (1) Grimmel shall prepare a site-specific monitoring plan to address the requirements outlined in 40 C.F.R. § 63.6625(b)(1).
- (2) Grimmel shall install, operate, and maintain the CPMS on Generator #1.
- (3) The CPMS shall be continuously operated in accordance with the site-specific monitoring plan at all times that Generator #1 is operating except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities.
- (4) The CPMS must collect data at least once every 15 minutes.

- (5) For CPMS measuring temperature range, the temperature sensor must have a minimum tolerance of 5° F or 1% of measurement range, whichever is larger.
- (6) Grimmel shall conduct a CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
[40 C.F.R. § 63.6625(b), § 63.6635, Table 6, and 06-096 C.M.R. ch. 115, BPT]

b. Continuous Emission Monitoring System (CEMS)

If Grimmel elects to demonstrate compliance through a CEMS the following requirements apply:

- (1) Grimmel shall install, operate, and maintain a CEMS according to applicable performance specifications of 40 C.F.R. Part 60, appendix B.
- (2) Grimmel shall conduct an initial performance evaluation and annual relative accuracy test audit (RATA) of the CEMS according to 40 C.F.R. § 63.8 and 40 C.F.R. Part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 C.F.R. part 60, appendix F, procedure 1.
- (3) The CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15 minute period.
- (4) CEMS data must be reduced as specified in 40 C.F.R. § 63.8(g)(2) and recorded in parts per million at 15% oxygen or the equivalent CO₂ concentration.
[40 C.F.R. § 63.6625(a) and 06-096 C.M.R. ch. 115, BPT]

4. Performance Tests

- a. Grimmel shall conduct an initial performance test in accordance with Table 4 of Subpart ZZZZ upon startup of Generator #1. [60 C.F.R. § 63.6612(a)]
- b. Grimmel shall conduct three separate test runs for each performance test. Each test run must be at least one hour, unless otherwise specified. [40 C.F.R. § 63.6620(d)]
- c. The engine percent load during a performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination shall be included in the notification of compliance status. The report shall contain the information specified in 40 C.F.R. § 63.6620(i).
- d. Grimmel shall conduct additional performance tests every 8,760 hours of operation or three years, whichever comes first. [40 C.F.R. § 63.6615 and Table 3]
- e. Grimmel is not required to start Generator #1 solely to conduct a performance test. [40 C.F.R. § 63.6620(b)]

5. General Requirement to Minimize Emissions

At all times Grimmel shall operate and maintain Generator #1, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 C.F.R. § 63.6605(b)]

6. Reporting

Grimmel shall submit to EPA all reports required by Subpart ZZZZ including, but not limited to, the following:

- a. Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. § 63.6645(g)]
- b. Notification of Compliance Status within 60 days of completion of the initial compliance test. [40 C.F.R. § 63.6645(h)]
- c. Semiannual Compliance Reports. [40 C.F.R. § 63.6650 and Table 7]

7. Recordkeeping

Grimmel shall keep all records required by Subpart ZZZZ including, but not limited to, the following:

- a. A copy of each notification and report that was submitted to comply with Subpart ZZZZ, including all supporting documentation.
- b. Records of the occurrence and duration of each malfunction of the engine, pollution control equipment, or monitoring equipment.
- c. Records of performance tests and performance evaluations.
- d. Records of all required maintenance performed on air pollution control and monitoring equipment.
- e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions taken to restore normal operation.
- f. Records that show continuous compliance with each applicable emission or operating limitation.
- g. Records of maintenance conducted.
- h. Records must be kept readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

[40 C.F.R. § 63.6655 and § 63.6660]

(17) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 115, BPT]

(18) **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]

- (19) Grimmel 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 13 DAY OF October, 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: April 6, 2017

Date of application acceptance: April 6, 2017

Date filed with the Board of Environmental Protection:

This Order prepared by Benjamin Goundie, Bureau of Air Quality.

