



DEPARTMENT ORDER

**Merle L. Lloyd & Sons
Somerset County
Norridgewock, Maine
A-441-71-H-M**

**Departmental
Findings of Fact and Order
Air Emission License
Minor Revision**

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

Merle L. Lloyd & Sons (Merle Lloyd) has requested a minor revision to its license in order to classify Generator #1 as non-emergency.

The main office for Merle Lloyd is located at 45 Main Street in Anson, Maine and Generator #1 is located at the facility's Norridgewock Pit on Lloyd Road in Norridgewock, 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	Firing Rate (gal/hr)	Fuel Type, % sulfur
Generator #1	1.50	150 kW ----- 200 HP	10.95	Distillate Fuel, 0.0015% sulfur by weight

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.

D. Application Classification

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

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

E. Facility Classification

The facility is licensed as follows:

- As a natural minor source of air emissions, because facility emissions cannot exceed major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. **BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

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

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

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

B. Generator #1 Reclassification

Air emission license A-441-71-G-R classifies Generator #1 as a portable, nonroad engine. This classification exempts generators from *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ; however, it requires that the engine be moved at least once during a source’s operating season. Merle Lloyd intends to maintain the engine in one location and has requested that Generator #1 be classified as a non-emergency engine, making it subject to 40 C.F.R. Part 63, Subpart ZZZZ.

This reclassification does not change any BPT conditions listed in A-441-71-G-R; therefore, only 40 C.F.R. Part 63, Subpart ZZZZ requirements will be addressed in this amendment.

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

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to Generator #1. The unit is considered to be an existing, non-emergency stationary reciprocating internal combustion engine at an area HAP source, rated below 300 HP. It is not subject to New Source Performance Standards regulations and EPA’s August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements. [40 C.F.R. § 63.6585]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart ZZZZ requirements is listed below.

- a. Emission and Operating Limitations

Merle Lloyd shall comply with the requirements in the following table:

Engine	Emission Limits (except during startup)	Operating Requirements
Generator #1 200 HP (non-emergency non-black start)	<i>This unit is not subject to any emission limitations pursuant to 40 CFR Part 63, Subpart ZZZZ.</i>	1. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; 2. Inspect air cleaner every 1,000 hours of operations or annually, whichever comes first, and replace as necessary; 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 C.F.R. § 63.6603(a) and Table 2b(2)(b)]

Engine	Emission Limits (except during startup)	Operating Requirements
<p>Generator #1 200 HP (non-emergency non-black start)</p>	<p><i>This unit is not subject to any emission limitations pursuant to 40 CFR Part 63, Subpart ZZZZ.</i></p>	<p>Merle Lloyd has the option of utilizing an oil analysis program in order to extend the oil change requirement according to the following requirements:</p> <ol style="list-style-type: none"> 1. The oil analysis shall be performed at the same frequency specified for changing the oil. 2. The analysis program shall, as minimum, analyze the following three parameters: <ul style="list-style-type: none"> - Total Base Number (TBN) - Viscosity - Percent water content. 3. If the following values of the three parameters are met, Merle Lloyd is not required to change the oil. <ul style="list-style-type: none"> - TBN \geq 30% TBN when new - Viscosity \leq 20% change from value when new - \leq 0.5% water by volume <p>If the parameters are not met, Lloyd shall change the oil within 2 business days of receiving the results or before commencing operation, whichever is later.</p> 4. Merle Lloyd shall keep records of the analyses and oil changes, and the program must be a part of the maintenance plan for the engine. <p>[40 C.F.R. § 63.6625(i)]</p>

b. Ultra-Low Sulfur Diesel Fuel Use

The diesel fuel fired in Generator #1 shall not exceed 15 ppm sulfur (0.0015% sulfur) by weight [40 C.F.R. § 63.6604(a)]

c. General Requirements

(1) Merle Lloyd shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to it at all times. Merle Lloyd shall operate Generator #1 in a manner consistent with safety and good air pollution control practices for minimizing emissions.

Merle Lloyd may instead choose to develop its own maintenance plan for Generator #1 which provides, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions.

The general duty to minimize emissions does not require the facility to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operations and maintenance procedures are being used will be based on information available to the Administrator which 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 source.

[§§ 63.6605 63.6625(e)]

- (2) Merle Lloyd shall 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 for each engine. Startup time shall not exceed 30 minutes.
[40 C.F.R. § 63.6625(h)]

d. Demonstrating Continuous Compliance

- (1) Merle Lloyd shall report each instance in which the facility did not meet each applicable operating limitation. These "deviations from the emission and operating limitations in this subpart" shall be reported in a Compliance report by January 31st of the following year, including the following information:

- (a) Company name and address;
- (b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
- (c) Date of the report and the year that the deviation occurred;
- (d) The number of malfunctions that year (if applicable), when they occurred, what caused them, and what steps were taken to fix them;
- (e) The total operating time of Generator #1 when the deviation occurred; and
- (f) Explanation of the deviation

[40 C.F.R. §§ 63.6640 (b) and 63.6650(d),(c)]

- (2) Merle Lloyd shall report each instance when the requirements in Table 8 (General Provisions) of this subpart were not met. [40 C.F.R. § 63.6640 (e)]

e. Recordkeeping

Merle Lloyd shall keep the following records:

- (1) Records of maintenance conducted on Generator #1 to demonstrate that it was operated and maintained according to the facility's maintenance plan.
- (2) Records of the occurrence and duration of each malfunction of operation;
- (3) Records of action taken during periods of malfunction to minimize emissions in accordance with (1) of the General Requirements part of this section, including corrective actions to restore malfunctioning equipment to its normal or usual manner of operation;

All Records shall be kept in a form suitable and readily available for expeditious review according to § 63.10(b)(1); they must be kept for 5 years of each occurrence, measurement, maintenance, corrective action, report or record.
[40 C.F.R. §§ 63.6655(a),(b), and (d) and 63.6660]

C. Annual Emissions

Because Merle Lloyd is currently licensed with a fuel limit on Generator #1, this minor revision does not change the facility's licensed annual emissions.

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-441-71-H-M subject to the conditions found in Air Emission License A-441-71-G-R 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 Condition is in Addition to the Conditions of A-441-71-G-R

(18) **Generator #1 NESHAP Requirements**

Merle Lloyd shall meet the following requirements for *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ:

A. Emission and Operating Limitations

Merle Lloyd shall comply with the requirements in the following table:

Engine	Emission Limits (except during startup)	Operating Requirements
<p>Generator #1 200 HP (non-emergency non-black start)</p>	<p><i>This unit is not subject to any emission limitations pursuant to 40 CFR Part 63, Subpart ZZZZ.</i></p>	<p>1. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;</p> <p>2. Inspect air cleaner every 1,000 hours of operations or annually, whichever comes first, and replace as necessary;</p> <p>3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</p> <p>[40 C.F.R. § 63.6603(a) and Table 2b(2)(b)]</p> <p>Merle Lloyd has the option of utilizing an oil analysis program in order to extend the oil change requirement according to the following requirements:</p> <p>1. The oil analysis shall be performed at the same frequency specified for changing the oil.</p> <p>2. The analysis program shall, as minimum, analyze the following three parameters:</p> <ul style="list-style-type: none"> - Total Base Number (TBN) - Viscosity - Percent water content. <p>3. If the following values of the three parameters are met, Merle Lloyd is not required to change the oil.</p> <ul style="list-style-type: none"> - TBN \geq30% TBN when new - Viscosity \leq20% change from value when new - \leq0.5% water by volume <p>If the parameters are not met, Lloyd shall change the oil within 2 business days of receiving the results or before commencing operation, whichever is later.</p> <p>4. Merle Lloyd shall keep records of the analyses and oil changes, and the program must be a part of the maintenance plan for the engine.</p> <p>[40 C.F.R. § 63.6625(i)]</p>

B. Ultra-Low Sulfur Diesel Fuel Use

The diesel fuel fired in Generator #1 shall not exceed 15 ppm sulfur (0.0015% sulfur) by weight [40 C.F.R. § 63.6604(a)]

C. General Requirements

1. Merle Lloyd shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to it at all times. Merle Lloyd shall operate Generator #1 in a manner consistent with safety and good air pollution control practices for minimizing emissions.

Merle Lloyd may instead choose to develop its own maintenance plan for Generator #1 which provides, to the extent practicable, for the maintenance and operation of

the engine in a manner consistent with good air pollution control practices for minimizing emissions.

The general duty to minimize emissions does not require the facility to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operations and maintenance procedures are being used will be based on information available to the Administrator which 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 source.

[§§ 63.6605 63.6625(e)]

2. Merle Lloyd shall 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 for each engine. Startup time shall not exceed 30 minutes.
[40 C.F.R. § 63.6625(h)]

D. Demonstrating Continuous Compliance

1. Merle Lloyd shall report to the Department and EPA each instance in which the facility did not meet each applicable operating limitation. These "deviations from the emission and operating limitations in this subpart" shall be reported in a Compliance report by January 31st of the following year, including the following information:
 - a. Company name and address;
 - b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
 - c. Date of the report and the year that the deviation occurred;
 - d. The number of malfunctions that year (if applicable), when they occurred, what caused them, and what steps were taken to fix them;
 - e. The total operating time of Generator #1 when the deviation occurred; and
 - f. Explanation of the deviation

[40 C.F.R. §§ 63.6640 (b) and 63.6650(d),(c)]

2. Merle Lloyd shall report each instance when the requirements in Table 8 (General Provisions) of this subpart were not met. [40 C.F.R. § 63.6640 (e)]

E. Recordkeeping

Merle Lloyd shall keep the following records:

- a. Records of maintenance conducted on Generator #1 to demonstrate that it was operated and maintained according to the facility's maintenance plan.
- b. Records of the occurrence and duration of each malfunction of operation;

- c. Records of action taken during periods of malfunction to minimize emissions in accordance with (1) of the General Requirements part of this section, including corrective actions to restore malfunctioning equipment to its normal or usual manner of operation;

All Records shall be kept in a form suitable and readily available for expeditious review according to § 63.10(b)(1); they must be kept for 5 years of each occurrence, measurement, maintenance, corrective action, report or record.

[40 C.F.R. §§ 63.6655(a),(b), and (d) and 63.6660]

DONE AND DATED IN AUGUSTA, MAINE THIS 14 DAY OF September, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Casse for
PAUL MERCER, COMMISSIONER

[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.]

The term of this amendment shall be concurrent with the term of Air Emission License A-441-71-G-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 06/22/2018

Date of application acceptance: 06/22/2018

Date filed with the Board of Environmental Protection:

This Order prepared by Colby Fortier-Brown, Bureau of Air Quality.

