STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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DEPARTMENT ORDER

FPL Energy Wyman LLC & **FPL Energy Wyman IV LLC** **Cumberland County** **Yarmouth, Maine** **A-388-70-G-R**	**Departmental** **Findings of Fact and Order** **Part 70 Air Emission License** **Renewal**

FINDINGS OF FACT

After review of the Part 70 license 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

FACILITY	FPL Energy Wyman LLC and FPL Energy Wyman IV LLC (FPLE Wyman)
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	221112 (Fossil Fuel Electric Power Generation)
NATURE OF BUSINESS	850 MW electric generating facility
FACILITY LOCATION	677 Cousins Street, Yarmouth, Maine 04096

FPL Energy Wyman LLC & FPL Energy Wyman IV LLC (FPLE Wyman) is an 850 MW fossil fuel-fired electric generating facility consisting of four electric generating units, an auxiliary boiler, and an emergency generator located on Cousins Island in Yarmouth, Maine.

FPLE Wyman has the potential to emit more than 100 tons per year (TPY) of particulate matter (PM), particulate matter under 10 micrometers (PM_{10}), particulate matter under 2.5 micrometers ($PM_{2.5}$), sulfur dioxide (SO_2), nitrogen oxides (NO_X), and carbon monoxide (CO) and more than 50 TPY of volatile organic compounds (VOC); therefore, the source is classified as a major source for criteria pollutants.

FPLE Wyman has the potential to emit 10 TPY or more of a single hazardous air pollutant (HAP) or 25 TPY or more of combined HAP; therefore, the source is classified as a major source for HAP.

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Boilers

Equipment	Max. Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Manuf. Date	Install. Date	Stack #
Unit #1	630	4,200	#6 Fuel Oil, 0.5%	1957	1957	1A
		4,500	Spec. Waste Oil			
Unit #2	630	4,200	#6 Fuel Oil, 0.5%	1958	1958	1A
		4,500	Spec. Waste Oil			
Unit #3	1,190	7,933	#6 Fuel Oil, 0.5%	1963	1965	1B
		8,500	Spec. Waste Oil			
			Distillate Fuel, 0.0015%			
Unit #4	6,290	41,933	#6 Fuel Oil, 0.5%	1974	1975	4
		44,930	Spec. Waste Oil			
			Distillate Fuel, 0.0015%			
Unit #5	72	480	#6 Fuel Oil, 0.5%	1977	1977	1A, 5
		514.3	Spec. Waste Oil			
			Distillate Fuel, 0.0015%			

Generator

Equipment	Max. Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output (kW)	Fuel Type, % sulfur	Manuf. Date	Install. Date	Stack #
Diesel Generator	5.25	38.3	600	Distillate Fuel, 0.0015%	1974	1975	3

FPLE Wyman has additional insignificant activities which do not need to be listed in the emission equipment tables above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

C. Acronyms and Units of Measurement

The following acronyms and units of measurement are used in this license:

Acronym/Unit	Description
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BPT	Best Practical Treatment
C.F.R.	Code of Federal Regulations
C.M.R.	Code of Maine Rules
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emissions Monitoring System
CMS	Continuous Monitoring System
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
EGU	electric generating unit
EPA or US EPA	United States Environmental Protection Agency
ESP	electrostatic precipitator
gal/hr	gallon per hour
GHG	greenhouse gases
HAP	hazardous air pollutants
HCl	hydrogen chloride or hydrochloric acid
Hg	mercury
ISO-NE	Independent System Operator – New England
lb	pound
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal units
M.R.S.	Maine Revised Statutes
MMBtu	million British thermal units
MMBtu/hr	million British thermal units per hour
MW	megawatt
NEPOOL	New England Power Pool
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
O_2	oxygen
PM	particulate matter less than 100 microns in diameter

Acronym/Unit	Description
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppmdv	parts per million on a dry volume basis
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RICE	reciprocating internal combustion engine
SO_2	sulfur dioxide
TPY	ton per year
VOC	volatile organic compounds

D. Definitions

Capacity Factor for a liquid oil-fired electric generating unit (EGU) means the total annual heat input from oil divided by the product of maximum hourly heat input for the EGU, regardless of fuel, multiplied by 8,760 hours. [40 C.F.R. § 63.10042]

Control Device means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The types of equipment that may commonly be used as control devices include, but are not limited to, fabric filters, mechanical collectors, electrostatic precipitators, inertial separators, afterburners, thermal or catalytic incinerators, adsorption devices (such as carbon beds), condensers, scrubbers (such as wet collection and gas absorption devices), selective catalytic or non-catalytic reduction systems, flue gas recirculation systems, spray dryers, spray towers, mist eliminators, acid plants, sulfur recovery plants, injection systems (such as water, steam, ammonia, sorbent. or limestone injection), and combustion devices independent of the particular process being conducted at an emissions unit (e.g., the destruction of emissions achieved by venting process emission streams to flares, boilers, or process heaters). For purposes of this part, a control device does not include passive control measures that act to prevent pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics. If an applicable requirement establishes that particular equipment which otherwise meets this definition of a control device does not constitute a control device as applied to a particular pollutant-specific emissions unit, then that definition shall be binding for purposes of this part. [40 C.F.R. § 64.1]

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.

Limited-Use Liquid Oil-Fired Subcategory means an oil-fired electric utility steam generating unit with an annual capacity factor when burning oil of less than 8% of its maximum or nameplate heat input, whichever is greater, averaged over a 24-month block contiguous period commencing on the first month following the compliance date specified in 40 C.F.R. § 63.9984. [40 C.F.R. § 63.10042]

Long-Term Cold Storage means the complete shutdown of a unit intended to last for an extended period of time (at least two calendar years) where notice for long-term cold storage is provided under 40 C.F.R. § 75.61(a)(7). [40 C.F.R. § 72.2]

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.

Rolling 90-Operating-Day Average. For the purposes of determining compliance with the NO_x lb/MMBtu BART emission limit, *Rolling 90-Operating-Day Average* means the NO_x emission rate calculated as the arithmetic average of all hourly emission rates of NO_x for 90 successive boiler operating days. Each boiler operating day shall establish a new rolling 90-operating-day average period. [A-388-70-F-A (4/6/2015), BPT]

Specification Waste Oil means a petroleum-based oil which, through use or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, and meets all of the following requirements:

- It has sufficient liquid content to be free flowing;
- It meets all of the constituent and property standards as specified in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860;
- It does not otherwise exhibit hazardous waste characteristics; and
- It has not been mixed with a hazardous waste.

E. 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 application for FPLE Wyman does not include the licensing of increased emissions or the installation of new or modified equipment; therefore, the license is a Part 70 License renewal issued under *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

F. Facility Description

FPLE Wyman is an 850-MW electric generating facility located on Cousins Island in Yarmouth, Maine. The equipment consists of four electrical generation units (Units #1-#4), which all fire #6 fuel oil and specification waste oil, as well as distillate fuel (Units #3-#4). There is also a smaller, oil-fired auxiliary boiler (Unit #5) which provides building heat and auxiliary steam and a back-up diesel generator which provides electricity for use on-site during emergency situations.

FPLE Wyman is part of the New England Power Pool (NEPOOL) grid administered by Independent System Operator – New England (ISO-NE). The operating loads, dispatch schedule, and number of hours the facility is on-line are determined by NEPOOL/ISO-NE; therefore, there are variations in the facility's operation from hour to hour and season to season. The peak generating times for FPLE Wyman are traditionally during the winter and summer seasons.

G. General Facility Requirements

FPLE Wyman is subject to the state and federal regulations listed below in addition to the regulations listed for specific units as described further in this license.

Citation	Requirement Title
06-096 C.M.R. ch. 101	Visible Emissions Regulation
06-096 C.M.R. ch. 102	Open Burning
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation
06-096 C.M.R. ch. 109	Emergency Episode Regulations
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation
06-096 C.M.R. ch. 110	Ambient Air Quality Standards
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques
06-096 C.M.R. ch. 117	Source Surveillance – Emissions Monitoring
06-096 C.M.R. ch. 130	Solvent Cleaners
06-096 C.M.R. ch. 137	Emission Statements

Citation	Requirement Title
06-096 C.M.R. ch. 138	Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides
06-096 C.M.R. ch. 140	Part 70 Air Emission License Regulations
06-096 C.M.R. ch. 143	New Source Performance Standards
06-096 C.M.R. ch. 144	National Emission Standards for Hazardous Air Pollutants
06-096 C.M.R. ch. 145	NO_x Control Program
06-096 C.M.R. ch. 156	CO_2 Budget Trading Program
40 C.F.R. Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators
40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 C.F.R. Part 63, Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units
40 C.F.R. Part 70	State Operating Permit Programs
40 C.F.R. Part 72	Permits Regulation (Acid Rain)
40 C.F.R. Part 73	Sulfur Dioxide Allowance System
40 C.F.R. Part 75	Continuous Emissions Monitoring
40 C.F.R. Part 98	Mandatory Greenhouse Gas Reporting

Note: C.M.R. = Code of Maine Regulations
C.F.R. = Code of Federal Regulations

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

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 as well as for those sources located in designated non-attainment areas.

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

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

B. NO_x RACT (Reasonably Available Control Technology) and NO_x Control Program

Chapter 138: NO_x RACT

FPLE Wyman is subject to *Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides*, 06-096 C.M.R. ch. 138 (NO_x RACT). This regulation is applicable to sources that have the potential to emit quantities of NO_X equal to or greater than 100 tons/year. Amendment A-388-71-C-A, issued to the facility on May 18, 1995, addressed NO_x RACT requirements. Units #1-5 were determined to be meeting NOx RACT by meeting the following requirements:

Unit	NO_x RACT Requirements
Unit #1	Meeting emission limits of 0.45 lb/MMBtu and 283.5 lb/hr using bias drilled burner caps and an existing low-NO_x burner system
Unit #2	Meeting emission limits of 0.45 lb/MMBtu and 283.5 lb/hr using bias drilled burner caps and an existing low-NO_x burner system
Unit #3	Meeting emission limits of 0.30 lb/MMBtu and 357.0 lb/hr
Unit #4	Meeting emission limits of 0.30 lb/MMBtu and 1,887.0 lb/hr
Unit #5	Meeting emission limits of 0.35 lb/MMBtu and 25.2 lb/hr through the installation and use of low-NO_x burners

Chapter 145: NO_x Control Program

FPLE Wyman is subject to *NO_x Control Program*, 06-096 C.M.R. ch. 145 (Chapter 145). This regulation applies to any fossil fuel fired electric generating unit with a heat input greater than 250 MMBtu/hr located in counties that have not received a waiver of NO_x control requirements pursuant to Section 182(f) of the 1990 Clean Air Act Amendments. Units #1-#4 are subject to Chapter 145.

In accordance with Section 3.A of Chapter 145 and prior to the 5/1/2003 deadline specified therein, FPLE Wyman provided the demonstration that instead of selective non-catalytic reduction (SNCR) technology specified in Chapter 145, alternate control technology would achieve comparable or better NO_x reductions and air quality benefits than would be achieved if SNCR was applied to each unit. This alternate technology was approved by the Board of Environmental Protection (the Board) in license amendment A-388-71-G-M (June 6, 2002). The installation of these alternate measures was completed at the facility in April 2003, and the system's performance continued to be optimized.

Actual performance data of Units #1 and #2 confirm their compliance with the NO_x emission limit of 0.22 lb/MMBtu on a 90-day rolling average basis, as specified in 3.B.2 of Chapter 145. This limit is included in this license and includes the allowance of emissions averaging between the two units.

Actual performance data of Units #3 and #4, collected between the date of installation of the approved controls and the end of 2006, showed that it is not technically feasible to

consistently meet the final limits of Chapter 145 with the control technology approved by the Board. Therefore, in accordance with Section 3.D of Chapter 145, FPLE Wyman applied for an alternative NO_x emission rate for Units #3 and #4 prior to the end of the interim period and submitted technical information and emission data supporting the alternative limit. The Board approved the following alternative NO_x emission limits for Units #3 and #4 in license amendment A-388-70-C-A (September 20, 2007):

Unit #3: 0.175 lb/MMBtu, 90-day rolling average basis
Unit #4: 0.170 lb/MMBtu, 90-day rolling average basis
Combined average of Units #3 and #4: 0.165 lb/MMBtu, 90-day rolling average basis.

These limits are included in this license.

C. VOC RACT (Reasonably Available Control Technology)

FPLE Wyman is not subject to *Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds*, 06-096 C.M.R. ch. 134 (VOC RACT). This regulation is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year from non-exempt equipment. Although FPLE Wyman has the potential to emit quantities of VOC equal to or greater than 40 tons/year, these emissions are all from incomplete combustion and are considered exempt per 06-096 C.M.R. ch. 134, § 1.C.(4). With the exemption of these VOC emissions, the total emitted quantity of VOC emissions from the facility is under the 40 TPY applicability threshold. [06-096 C.M.R. ch. 134, §§ 1.A.(1) and 1.C.(4)]

D. Acid Rain

FPLE Wyman Units #1-#4 are subject to the federal Acid Rain Program, *State Operating Permits Program*, 40 C.F.R. Part 70, and *Permits Regulation*, C.F.R. Part 72; therefore, the facility is required to have a Phase II acid rain permit. FPLE Wyman was issued an acid rain permit, A-388-70-B-S, on December 29, 1997.

E. Mandatory Greenhouse Gas (GHG) Reporting

Federal regulation *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98, which contains GHG reporting and related monitoring and recordkeeping requirements, is applicable to the owners/operators of any facility f that contains any source category that is listed in Table A–3 of this subpart in any calendar year starting in 2010. [40 C.F.R. § 98.2. (a)(1)] FPLE Wyman is an electric generation facility that reports CO_2 mass emissions year-round through 40 C.F.R. Part 75 (Subpart D), as found in Table A-3 of this subpart.

FPLE Wyman shall fulfill the recordkeeping and reporting requirements of 40 C.F.R. Part 98.

F. Best Available Retrofit Technology (BART)

FPLE Wyman Units #3 and #4 are eligible BART sources as defined in *Protection of Visibility*, 40 C.F.R. Part 51, Subpart P. The units are required to meet BART per 38 M.R.S § 582(5)(C) and § 603-A(8). A BART license, A-388-77-2-M, was issued on November 2, 2010, replacing the previous BART license. The BART findings for Units #3 and #4 at FPLE Wyman were determined to be the following:

Unit	BART Requirements
Unit #3	• Limit PM emissions to 0.18 lb/MMBtu. • Limit SO_2 emissions by firing #6 fuel oil having a sulfur content of 0.7% or less, by weight. • Limit NO_x emissions to either 0.175 lb/MMBtu on a 90-operating-day rolling average, or limit average NO_x emissions from Units #3 and #4 to 0.165 lb/MMBtu on a 90-operating-day rolling average.
Unit #4	• Limit PM emissions to 0.1 lb/MMBtu • Limit SO_2 emissions to not exceed 0.8 lb/MMBtu (0.7% sulfur, by weight) • Limit NO_x emissions to either 0.170 lb/MMBtu on a 90-operating-day rolling average, or limit average NO_x emissions from Units #3 and #4 to 0.165 lb/MMBtu on a 90-operating-day rolling average

G. CO_2 Budget Source

FPLE Wyman was issued license A-388-78-A-N (January 15, 2009) per Maine's *CO_2 Budget Trading Program*, 06-096 C.M.R. ch. 156 for Units #1-#4.

H. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring, 40 C.F.R. Part 64 is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100% of the major source threshold (50 tpy for VOC and 100 tpy for any other criteria pollutant).

This regulation's 40 C.F.R. § 64.2(b)(1)(vi) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards for which a Part 70 air emission license specifies a continuous compliance determination method. Furthermore, 40 C.F.R. § 64.2(b)(1)(i) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards in a NSPS or NESHAP regulation proposed by the Administrator after November 15, 1990. [40 C.F.R. § 64.2(b)]

The following table lists all the specific pollutants for each unit meeting CAM applicability criteria and the determination of the applicability of CAM requirements for each.

40 C.F.R. Part 64 Applicability Table

Unit	Pollutant	CAM Required	Reason	Regulatory Authority
Unit #3	PM/PM_{10}	Yes	Multi-clones are used to meet emission limits of 0.18 lb/MMBtu and 238.0 lb/hr; pre-control emissions exceed 100 tpy.	40 C.F.R. § 64.2(a)
Unit #4	PM/PM_{10}	Yes	Electrostatic precipitator is used to meet emission limits of 0.1 lb/MMBtu and 629.0 lb/hr; pre-control emissions exceed 100 tpy.	40 C.F.R. § 64.2(a)
	NO_x	No	Operating a NO_x CEMS	40 C.F.R. § 64.2(b)(1)(vi)

FPLE Wyman submitted a CAM plan for PM/PM_{10} from Units #3 and #4, summarized below.

Unit	Eligible Pollutant	Indicator	Recording Frequency	Averaging Period
Unit #3 Multi-clones	PM/PM_{10}	Pressure Differential Across Multi-clone	Continuously	1-hour block averages
Unit #4 ESP	PM/PM_{10}	ESP Total Secondary Power	Continuously	3-hour block averages

The CAM requirements are incorporated in this license.

I. Fuel Sulfur Content Requirements

FPLE Wyman is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, the distillate fuel purchased or otherwise obtained for use at this facility shall not exceed 0.0015% by weight (15 ppm).

FPLE Wyman is licensed to fire #6 fuel oil (residual fuel). Per 38 M.R.S. § 603-A(2)(A)(1) and (2), as of July 1, 2018, no person shall import, distribute, or offer for sale any residual fuel oil with a sulfur content greater than 0.5% by weight. Therefore, the #6 fuel oil purchased or otherwise obtained for use at this facility shall not exceed 0.5% by weight.

The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018. [06-096 C.M.R. ch. 140, BPT]

J. *National Emission Standards for Hazardous Air Pollutants (NESHAP): Coal- and Oil-Fired Electric Utility Steam Generating Units*, 40 C.F.R. Part 63, Subpart UUUUU

Units #1-#4 are subject to *NESHAP: Coal- and Oil-Fired Electric Utility Steam Generating Units*, 40 C.F.R. Part 63, Subpart UUUUU. This subpart establishes emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from oil-fired electric utility steam generating units (EGU) and establishes requirements to demonstrate initial and continuous compliance with the emission limitations. The units are all existing, limited-use, liquid oil-fired boilers as defined in the rule. [40 C.F.R. §§ 63.9980, 63.9981, 63.9982(a)(1) and (d), and 63.9990(b)(3)]

The requirements of 40 C.F.R. Part 63, Subpart UUUUU specifically applicable to Units #1-#4 are the following:

1. General Requirements

    a. At all times FPLE Wyman shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, 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 shall be based on information available to the Department and/or EPA 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. [40 C.F.R. § 63.10000(b)]

    b. Should any of Units #1-#4 at FPLE Wyman cease to meet the definition of the limited-use liquid oil-fired subcategory, FPLE Wyman shall be in compliance with all requirements applicable to existing continental liquid oil-fired EGUs on the effective date of the switch and shall demonstrate compliance with those requirements within 180 days after that unit/those units exceed the 8% capacity factor threshold. Additionally, FPLE Wyman shall send a notification to EPA and the Department within 15 days of a unit's change in applicable subcategory under the rule. [40 C.F.R. §§ 63.9(j), 63.9984(c) and (f), and 63.9990(b)(1)]

2. Compliance Dates, Notifications, and Work Practice Requirements

    a. Initial Notification of Compliance

        FPLE Wyman submitted their Initial Notification to EPA and the Department on August 3, 2012. [40 C.F.R. §§ 63.9984(c) and 63.10030(a) and (b)]

b. Performance Tune-Up Program

(1) A boiler performance tune-up program shall be implemented. [40 C.F.R. §§ 63.9991(a)(1) and 63.10000(c)(2)(iv) and (e) and 40 C.F.R. Part 63, Subpart UUUUU, Tables 3 and 7]

(2) The first tune-up should have been completed within six months after April 16, 2015, as part of the facility's initial compliance demonstration. [40 C.F.R. §§ 63.9984(b) and (f) and 63.10005(a), (e), and (f)] FPLE Wyman completed the initial performance tune-ups for Units #1 and #2 on October 18, 2015; for Unit #3 on August 25, 2015; and for Unit #4 on November 2, 2015. FPLE Wyman completed subsequent performance tune-ups for Units #1-#4 between January 24, 2017, and January 31, 2017.

(3) Each subsequent performance tune-up shall be conducted no more than 36 calendar months after the previous performance tune-up unless neural network combustion optimization software is employed, in which case each subsequent performance tune-up shall be conducted no more than 48 calendar months after the previous performance tune-up. [40 C.F.R. §§ 63.10006(i) and 63.10021(e) and 40 C.F.R. Part 63, Subpart UUUUU, Table 3, Item 1]

(4) The boiler performance tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

(i) As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows: [40 C.F.R. § 63.10021(e)(1)]

1. Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO must be installed within three calendar months after the burner inspection; and
2. Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the operator.

(ii) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type. [40 C.F.R. § 63.10021(e)(2)]

(iii) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors. [40 C.F.R. § 63.10021(e)(4)]

(iv) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O_2 probes and/or sensors, adjusting the overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary. [40 C.F.R. § 63.10021(e)(5)]

(v) Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles. [40 C.F.R. § 63.10021(e)(6)]

(vi) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). You may use portable CO, NO_x and O_2 monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system. [40 C.F.R. § 63.10021(e)(7)]

(vii) If a unit is offline when a deadline to perform the performance tune-up passes, FPLE Wyman shall perform the performance tune-up work practice requirements within 30 days after the re-start of the affected unit. [40 C.F.R. § 63.10021(e)]

(5) Tune-Up Report: A tune-up report shall be maintained on-site and, if requested, submitted to EPA and the Department. This report shall contain the following information [40 C.F.R. § 63.10021(e)(8)]:

(i) The concentrations of CO and NOx in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion system;

(ii) A description of any corrective actions taken as a part of the combustion adjustment; and

(iii) The type and amount of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period.

(6) FPLE Wyman shall report the dates of each tune-up to EPA in hard copy, as specified in 40 C.F.R. § 63.10031(f)(5), through June 30, 2020. On or after July 1, 2020, FPLE Wyman shall report the date of all tune-ups electronically, in accordance with 40 C.F.R. § 63.10031(f). The tune-up report date is the date when the tune-up requirements in 40 C.F.R. § 63.10021(e)(6) and (7) are completed. [40 C.F.R. § 63.10021(e)(9)]

(7) After conducting the initial boiler performance tune-up, FPLE Wyman submitted their Notification of Compliance Status to EPA and the Department on April 6, 2016. [40 C.F.R. §§ 63.9984(c), 63.10005(k), 63.10011(e), and 63.10030(a) and (e)]

3. Reporting and Recordkeeping Requirements

a. Reporting Requirements

(1) FPLE Wyman shall submit a semiannual compliance report to EPA and the Department according to the dates required by 06-096 C.M.R. ch. 140 and included in this license. The semiannual compliance report shall contain the following information [40 C.F.R. §§ 63.10021(f) and (g) and 63.10031(a) through (c) and (g) and 40 C.F.R. Part 63, Subpart UUUUU, Table 8]:

(i) The information required by the summary report located in 40 C.F.R. § 63.10(e)(3)(vi);

(ii) Indication of whether any new types of fuel were burned during the reporting period;

(iii) The date of the most recent tune-up for each EGU, which is the date the tune-up provisions specified in 40 C.F.R. §§ 63.10021(e)(6) and (7) were completed;

(iv) A certification;

(v) If FPLE Wyman has a deviation from any work practice standard, the facility shall also submit a brief description of the deviation, duration of the deviation, emissions point identification, and the cause of the deviation; and

(vi) If FPLE Wyman had a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.

(2) Prior to July 1, 2020, FPLE Wyman shall mail a hard copy of the semiannual compliance report to EPA. On or after July 1, 2020, FPLE Wyman shall submit the semiannual compliance report to EPA's WebFIRE database by using EPA's Compliance and Emissions Data Reporting Interface (CEDRI), which is accessed through the EPA's Central Data Exchange (CDX) (http://cdx.epa.gov). FPLE Wyman shall use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. [40 C.F.R. § 63.10031(f)(4)]

b. Recordkeeping Requirements

FPLE Wyman shall maintain the following records in a form suitable and readily available for expeditious review, according to 40 C.F.R. § 63.10(b)(1) [40 C.F.R. §§ 63.10032(a), (c), and (g) through (j) and 63.10033(a)]:

(1) A copy of each notification and report that is submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that was submitted, according to the requirements in 40 C.F.R. § 63.10(b)(2)(xiv);

(2) Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in 40 C.F.R. § 63.10(b)(2)(viii);

(3) All records required by Table 7 of this subpart, including the results of each period performance tune-ups;

(4) Records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment;

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to it normal or usual manner of operation;

(6) Records of the types and amounts of fuel used during each startup and shutdown; and

(7) Records of the types and amounts of fuel use in each calendar quarter for each unit to document that the capacity factor limitation for the limited-use liquid oil-fired EGU subcategory is met.

K. Units #1 and #2

Units #1 and #2 are identical Foster-Wheeler Model 8-5556 front wall-fired steam generating units. Each unit has a maximum design heat input capacity of 630 MMBtu/hr. Units #1 and #2 were installed at the facility in 1957 and 1958, respectively, and are licensed to fire #6 fuel oil and specification waste oil (as defined in 06-096 C.M.R. ch. 860, *Waste Oil Management Rules*). Each unit has six burners that together are capable of firing 4,200 gal/hr of #6 fuel oil. Both units are utilized for electric power generation (55 MW each). Units #1 and #2 were placed into long-term cold storage, as defined in 40 C.F.R. § 72.2, as of midnight on October 1, 2018, and are intended to remain in long-term cold storage until at least October 1, 2020.

Emissions from each unit exhaust through separate breaching to a common flue designated as flue A within Stack #1. Flue A of Stack #1 has an inside diameter of 9.91 feet and an above ground level (AGL) height of 320 feet.

1. Control Equipment

   a. Particulate Matter

      (1) FPLE Wyman shall control particulate matter emissions from Units #1 and #2 by use of multiple centrifugal cyclones (multi-clones).
      [A-388-71-A-R (12/27/1995), BPT]

      (2) FPLE Wyman shall maintain a log of all maintenance performed on each multi-clone, as well as a log documenting the nature of all failures and the corrective actions taken. [A-388-70-A-I (10/2/2002), BPT]

b. Nitrogen Oxides

FPLE Wyman shall operate low-NO_x burners on Units #1 and #2 for control of NO_x emissions. [A-388-71-A-R (12/27/1995), BPT]

2. New Source Performance Standards (NSPS)

Units #1 and #2 are both not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Fossil-Fuel-Fired Steam Generators*, 40 C.F.R. Part 60, Subpart D, *Standards of Performance for Electric Utility Steam Generating Units*, 40 C.F.R. Part 60, Subpart Da, or *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Db. The units were both manufactured before the applicability dates of August 17, 1971, September 18, 1978, and June 19, 1984, for 40 C.F.R. Part 60, Subparts D, Da, and Db, respectively, and are therefore not subject to any of the three regulations.
[40 C.F.R. §§ 60.40, 60.40Da, and 60.40b]

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Units #1 and #2 are not subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, 40 C.F.R. Part 63, Subpart DDDDD. Both units are considered electric utility steam generating units (EGU) and are therefore considered exempt from this regulation. [40 C.F.R. § 63.7491(a)]

Units #1 and #2 are subject to *NESHAP: Coal- and Oil-Fired Electric Utility Steam Generating Units*, 40 C.F.R. Part 63, Subpart UUUUU. Both units are considered existing affected sources that meet the definition of a limited-use liquid oil-fired EGU as defined in 40 C.F.R. § 63.10042. [40 C.F.R. §§ 63.9981, 63.9982(d), and 63.10042] The requirements of 40 C.F.R. Part 63, Subpart UUUUU applicable to Units #1 and #2 were addressed earlier in this license.

4. Emission Limits and Streamlining

a. Criteria Pollutants

For Units #1 and #2, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.20 lb/MMBtu	06-096 C.M.R. ch. 103, § 2.A.(1)	0.20 lb/MMBtu
	126.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	126.0 lb/hr
PM_{10}	126.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	126.0 lb/hr
SO_2	331.0 lb/hr (3-hr block avg) (based on 0.5% sulfur #6 fuel oil, by weight)	06-096 C.M.R. Ch. 140, BPT	331.0 lb/hr (3-hr block avg)
NO_x	0.45 lb/MMBtu (24-hr block avg)	A-388-71-C-A (5/18/1995), NO_x RACT	0.45 lb/MMBtu (24-hr block avg)
	0.22 lb/MMBtu[1] (90-day rolling avg)	06-096 C.M.R. Ch. 145, § 3.B.(2)(a)	0.22 lb/MMBtu[1] (90-day rolling avg)
	283.5 lb/hr (24-hr block avg)	A-388-71-C-A (5/18/1995), NO_x RACT	283.5 lb/hr (24-hr block avg)
CO	315.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	315.0 lb/hr
VOC	63.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	1.0 lb/hr

[1] Emissions averaging between Units #1 and #2 is allowed per Ch. 145 to demonstrate compliance with this limit. [06-096 C.M.R. ch. 145, § 3.C]

b. Visible Emissions

Visible emissions from Units #1 and #2 shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The remaining five percent of all six-minute block averages on a quarterly basis shall be no greater than 45% opacity. Periods of start-up, shutdown, and malfunctions are included for the purpose of calculating block averages. Periods when the unit is not operating are not included for the purpose of calculating block averages. Quarterly basis is the period of time from January 1 to March 31, April 1 to June 30, etc. To demonstrate compliance with the limits above, FPLE Wyman shall operate and maintain a COMS on Units #1 and #2. [06-096 C.M.R. ch. 101, § 3.A.(1)(c)]

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Units #1 and #2 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five years from the date of the most recent previous stack test (1/26/2017 for Unit #1 and 1/31/2017 for Unit #2)[1]
	lb/hr		
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/hr	Fuel flow meter and fuel analysis[2]	Continuous (in accordance with 40 C.F.R. Part 75, App. D and F)
NO_X	lb/MMBtu[3]	NO_x CEMS	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A & B)
	lb/hr	NO_x CEMS	
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	COMS	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A & B)

[1] [38 M.R.S. § 589(2)]

[2] FPLE Wyman shall operate a fuel flow monitoring system on each unit which continuously monitors and records the rate of fuel oil delivered to and combusted within each unit. This system shall be maintained and operated in accordance with 40 C.F.R. Part 75, App. A & B. [A-388-70-A-I (10/2/2002), BPT and 40 C.F.R. Part 75]

[3] During periods of time when Units #1 and #2 are below 120 MMBtu/hr heat input, the lb/MMBtu value that is monitored shall not be included in determining the 24-hour block average basis NO_x emission rate (lb/MMBtu only). [A-388-71-C-A (5/18/1995), NO_x RACT]

[4] Compliance with the 90-day rolling average basis NO_x lb/MMBtu limit is only required for an individual unit when the total tons per year of NO_x from the unit is equal to or greater than the major source threshold of 100 tons per year on a 12-month calendar

year basis. The demonstration of annual emissions from the units shall be determined by actual NO_x CEMS data for each unit. [06-096 C.M.R. ch. 145, Section 3(E) and A-388-70-D-A, (December 9, 2005)]

6. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following periodic monitoring values for Units #1 and #2 and their associated air pollution control equipment as indicated in the following tables whenever the equipment is operating.

Units #1 and #2				
			Frequency	
Value	Units of Measure	Monitoring Tool/Method	Monitor	Record
#6 fuel oil use	Gallons	Fuel flow meter for each unit	Continuously	Monthly and 12-month rolling total
#6 fuel oil sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As Delivered/ As analyzed	As Delivered/ As analyzed
Waste oil use	Gallons	Estimation of amount collected and burned	As Collected	Monthly and 12-month rolling total
Heat input	MMBtu/hr	Fuel flow meter & fuel heating value	Continuously	Hourly (one-hour block averages)
Operating time	Hours	Boiler control system (DCS)	Continuously	Monthly and annually

Multi-clones on Units #1 and #2		
Records Maintained	Monitoring Tool/Method	Frequency
Documentation of maintenance, malfunction, and downtime of the multi-clones	Logbook or electronic log	As each situation occurs

7. Parameter Monitors

There are no Parameter Monitors required for Units #1 and #2.

8. CEMS and COMS

The table below lists the required continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS) for Units #1 and #2.

Pollutant and Continuous Monitors	Units	Averaging Period	Origin and Authority
NO_x CEMS[1]	lb/MMBtu[2]	24-hour block average	A-388-71-C-A (6/18/1995), NO_x RACT, 06-096 C.M.R. ch. 117, § 1.B.(2), and 40 C.F.R. § 75.10(a)(2) and (a)(3)
		90-day rolling average[3]	
	lb/hr	24-hour block average	
CO_2 CEMS	%	One-hour block average	40 C.F.R. § 75.10(a)(3)(i) and 06-096 C.M.R. ch. 117, § 1.B.(9)
Opacity COMS	%	6-minute block average	40 C.F.R. § 75.10(a)(4), 06-096 C.M.R. ch. 101, § 3.A.(1)(c), and 06-096 C.M.R. ch. 117, § 1.B.(1)

[1] In addition to the NO_x CEMS, FPLE Wyman shall also operate a diluent gas monitor. Both the NO_x CEMS and diluent gas monitor shall be operated on each stack breaching. [40 C.F.R. § 75.10(a)(2) and A-388-70-A-I (10/2/2002), BPT]

[2] During periods of time when Units #1 and #2 are operating below 120 MMBtu/hr heat input, the lb/MMBtu value that is monitored shall not be included in determining the 24-hour block arithmetic average NO_x emission rate. [A-388-71-C-A (5/18/1995), NO_x RACT]

[3] Compliance with the 90-day rolling average basis NO_x lb/MMBtu limit is only required for an individual unit when the total tons per year of NO_x from the unit is equal to or greater than the major source threshold of 100 tons per year on a 12-month rolling total basis . [06-096 C.M.R. ch. 145, § 3.E.]

L. Unit #3

Unit #3 is a Combustion Engineering Model 19861 Type R Reheat Steam Generator with a maximum design heat input capacity of 1,190 MMBtu/hr. The unit is equipped with 12 tangential low excess air type burners capable of firing #6 fuel oil at a maximum rate of 7,933 gal/hr. Construction began on Unit #3 in 1963, and it entered service in 1965. Unit #3 is licensed to fire #6 fuel oil, specification waste oil, and distillate fuel. Unit #3 is utilized for electric power generation with a 120 MW nominal gross capacity.

Emissions from Unit #3 exit through two separate breachings, #3A and #3B, to a flue designated as Flue B within Stack #1. Flue B of Stack #1 has an inside diameter of 10.14 feet and an AGL height of 320 feet.

1. #6 Fuel Oil Sulfur Content

   In FPLE Wyman's BART license, A-388-77-2-M (11/2/2010), BART for SO_2 emissions from Unit #3 was determined to be firing #6 fuel oil with a sulfur content limit of 0.7% by weight. Since then, 38 M.R.S. § 603-A(2)(A)(1) and (2) have been revised to prohibit the importation, distribution, or sale of any residual fuel, including #6 fuel oil, with a sulfur content that exceeds 0.5%, by weight. Therefore, the #6 fuel oil sulfur content BART requirement of 0.7% sulfur by weight shall be streamlined to the limit in 38 M.R.S. § 603-A(2)(A)(1) and (2) of 0.5% sulfur, by weight.

   The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018. [06-096 C.M.R. ch. 140, BPT]

2. Control Equipment

   a. Particulate Matter

      (1) FPLE Wyman shall particulate matter emissions from Unit #3 by use of multi-clones. [A-388-71-A-R (12/27/1995), BPT]

      (2) FPLE Wyman shall maintain a log of all maintenance performed on each cyclone, as well as a log documenting the nature of all failures and corrective actions taken. [A-388-70-A-I (10/2/2002), BPT]

   b. Nitrogen Oxides

      FPLE Wyman shall operate a staged combustion air system on Unit #3 to meet the NO_x emission limits for this unit. [A-388-71-C-A (5/18/1995), NO_x RACT and 06-096 C.M.R. ch. 145]

3. New Source Performance Standards (NSPS)

   Unit #3 is not subject to the NSPS titled *Standards of Performance for Fossil-Fuel-Fired Steam Generators*, 40 C.F.R. Part 60, Subpart D, *Standards of Performance for Electric Utility Steam Generating Units*, 40 C.F.R. Part 60, Subpart Da, or *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Db. The unit was manufactured before the applicability dates of August 17, 1971, September 18, 1978, and June 19, 1984, for 40 C.F.R. Part 60, Subparts D, Da, and Db, respectively, and is therefore not subject to any of the three regulations. [40 C.F.R. §§ 60.40, 60.40Da, and 60.40b]

4. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   Unit #3 is not subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, 40 C.F.R. Part 63, Subpart DDDDD. The unit is considered an EGU and is therefore considered exempt from this regulation. [40 C.F.R. § 63.7491(a)]

   Unit #3 is subject to *NESHAP: Coal- and Oil-Fired Electric Utility Steam Generating Units*, 40 C.F.R. Part 63, Subpart UUUUU. The unit is considered an existing affected source that meets the definition of a limited-use liquid oil-fired EGU as defined in 40 C.F.R. § 63.10042. [40 C.F.R. §§ 63.9981, 63.9982(d), and 63.10042] The requirements of 40 C.F.R. Part 63, Subpart UUUUU applicable to Unit #3 were addressed earlier in this license.

5. Emission Limits and Streamlining

   a. Criteria Pollutants

      For Unit #3, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.20 lb/MMBtu	06-096 C.M.R. ch. 103, § 2.A.(1)	0.18 lb/MMBtu[1]
	0.18 lb/MMBtu	A-388-77-2-M (11/2/2010), BART	
	238.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	238.0 lb/hr
PM_{10}	238.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	238.0 lb/hr
SO_2	625.2 lb/hr (based on 0.5% sulfur #6 fuel oil, by weight) (3-hr block avg)	06-096 C.M.R. ch. 140, BPT	625.2 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO_x	0.30 lb/MMBtu (24-hr block avg)	06-096 C.M.R. ch. 138, § 3.B.(1) & (8)	0.30 lb/MMBtu (24-hr block avg)
	0.175 lb/MMBtu (Rolling 90 operating-day avg) from Unit #3 alone	A-388-77-2-M (11/2/2010), BART	0.175 lb/MMBtu (Rolling 90 operating-day avg)
	0.165 lb/MMBtu (Rolling 90-operating-day avg) if the facility chooses to average emissions from Units #3 and #4	A-388-77-2-M (11/2/2010), BART	0.165 lb/MMBtu (Rolling 90-operating-day avg)
	357.0 lb/hr (24-hr block avg)	A-388-71-C-A (5/18/1995), NO_x RACT	357.0 lb/hr (24-hr block avg)
CO	595.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	595.0 lb/hr
VOC	119.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	119.0 lb/hr

[1] Streamlining requested

b. Visible Emissions

Visible emissions from Unit #3 shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The remaining five percent of all six-minute block averages on a quarterly basis shall be no greater than 45% opacity. Periods of start-up, shutdown, and malfunctions are included for the purpose of calculating block averages. Periods when the unit is not operating are not included for the purpose of calculating block averages. Quarterly basis is the period of time from January 1 to March 31, April 1 to June 30, etc. To demonstrate compliance with the limits above, FPLE Wyman shall be required to operate and maintain a COMS on Unit #3. [06-096 C.M.R. ch. 101, § 3.A.(1)(c)]

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with Unit #3 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five years from the date of the most recent previous stack test (1/30/2017)[1]
	lb/hr		

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/MMBtu lb/hr	Fuel flow meter and fuel analysis[2]	Continuous (in accordance with 40 C.F.R. Part 75, App. D and F)
NO_X	lb/MMBtu[3] lb/hr	NO_x CEMS	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A & B)
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	COMS [4]	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A & B)

[1] [38 M.R.S. § 589(2)]

[2] FPLE Wyman shall operate a fuel flow monitoring system on Unit #3 which continuously monitors and records the rate of fuel oil delivered to and combusted within the unit. This system shall be maintained and operated in accordance with 40 C.F.R. Part 75, App. A & B. [A-388-70-A-I (10/2/2002), BPT and 40 C.F.R. Part 75]

[3] Periods of time when the unit is firing at or below a heat input capacity of 226 MMBtu/hr shall not be included in determining the 24-hour block arithmetic average NO_x emission rate (lb/MMBtu only). [A-388-71-C-A (5/18/1995), NO_x RACT]

[4] FPLE Wyman shall operate a COMS on each breaching of Unit #3 to demonstrate compliance with the opacity limit. [A-388-71-A-R (12/27/1995), BPT]

FPLE Wyman shall demonstrate compliance with the opacity limit using COMS data and a straight numerical average between breachings #3A and #3B. [A-388-70-A-I (10/2/2002), BPT]

7. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following periodic monitoring values for Unit #3 and its associated air pollution control equipment tables whenever the equipment is operating.

Unit #3				
			Frequency	
Value	Units of Measure	Monitoring Tool/Method	Monitor	Record
#6 fuel oil use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
#6 fuel oil sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As delivered/ As analyzed	As Delivered/ As Analyzed
Distillate fuel use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As Delivered/ As Analyzed	As Delivered/ As Analyzed
Waste oil use	Gallons	Estimation of amount collected and burned	As Collected	Monthly and 12-month rolling total
Heat input	MMBtu/hr	Fuel flow meter & fuel heating value	Continuously	Hourly (one-hour block averages)
Operating time	Hours	Boiler control system (DCS)	Continuously	Monthly and annually

Multi-clone on Unit #3		
Records Maintained	Monitoring Tool/Method	Frequency
Documentation of maintenance, malfunctions, and downtime of the multi-clone	Logbook or electronic log	As each situation occurs

8. Parameter Monitors

The only parameter monitor required During all operating times, FPLE Wyman shall operate, record data, and maintain records from the following parameter monitor for Unit #3 in accordance with FPLE Wyman's approved CAM plan:

Parameter	Frequency
Multi-clone differential pressure	Monitor: Continuously Record: One-hour block average

[40 C.F.R. Part 64]

9. Compliance Assurance Monitoring

FPLE Wyman shall meet the following CAM requirements for Unit #3:

Indicator	Pressure differential across multi-clones
Measurement Method	FPLE Wyman shall monitor pressure differential on the multi-clones with differential pressure transducers.
Indicator Range	The target pressure differential across the multi-clones shall be less than six inches of water on a one-hour block average basis. During the PM stack testing required by the Part 70 renewal, the pressure differential shall be recorded. FPLE Wyman may reestablish the target level based on data obtained during stack tests. Any change of the target level shall be submitted in a letter to the Department for written approval. The current target level shall remain in effect until the Department's written approval is received. If the pressure differential exceeds the target level, it is considered an excursion and the problem must be identified and repairs completed as necessary. The excursion will be reported to the Department in FPLE Wyman's semiannual reports.
Data Representativeness	The differential pressure transducers shall remain installed at the gas inlet and outlet ducts per manufacturer's design.
QA/QC	FPLE Wyman shall calibrate, maintain, and operate the instrumentation using procedures that take into account the manufacturer's specifications. The QA/QC procedures shall be submitted to the Department.
Monitoring Frequency	FPLE Wyman shall measure the multi-clones pressure differential continuously.
Data Collection Procedure	FPLE Wyman's electronic data system shall calculate and records one-hour block average pressure differentials. The system shall alarm when a one-hour block average pressure differential exceeds the established target level. When an alarm goes off, the operators shall manually record the time, the problem diagnosis, and the corrective action taken (including the time the corrective action was completed).
Averaging Period	One-hour block averages.

10. CEMS and COMS

The table below lists the required CEMS and COMS for Unit #3.

Continuous Monitors	Units	Averaging Period	Origin and Authority
NO_X CEMS[1]	lb/MMBtu[2]	24-hour block average, Rolling 90 operating-day average	A-388-71-C-A (5/18/1995), NO_x RACT, 06-096 C.M.R. ch. 117, § 1.B.(2), and 40 C.F.R. § 75.10(a)(2) and (a)(3)
	lb/hr	24-hour block average	
CO_2 CEMS	%	One-hour block average	40 C.F.R. § 75.10(a)(3)(i) and 06-096 C.M.R. ch. 117, § 1.B.(9)
Opacity COMS[3]	%	6-minute block average	40 C.F.R. § 75.10(a)(4), 06-096 C.M.R. ch. 101, § 3.A.(1)(c), and 06-096 C.M.R. ch. 117, § 1.B.(1)

[1] In addition to the NO_x CEMS, FPLE Wyman shall also operate a diluent gas monitor. Both the NO_x CEMS and diluent gas monitor shall be operated on each stack breaching. [40 C.F.R. § 75.10(a)(2) and A-388-70-A-I (10/2/2002), BPT]

[2] During periods of time when Unit #3 is operating below 226 MMBtu/hr heat input, the lb/MMBtu value that is monitored shall not be included in determining the 24-hour block arithmetic average NO_x emission rate. [A-388-71-C-A (5/18/1995), NO_x RACT]

[3] FPLE Wyman shall operate and maintain a COMS on both breachings of Unit #3. [A-388-71-A-R (12/27/1995), BPT]

M. Unit #4

Unit #4 is a Foster-Wheeler Model 08-2127 front wall-fired steam generating unit. The unit has a maximum design heat input capacity of 6,290 MMBtu/hr and is licensed to fire #6 fuel oil, specification waste oil, and distillate fuel. Unit #4 has 30 burners capable of firing #6 fuel oil at a rate of 41,933 gal/hr. Construction began on Unit #4 in 1974, and it entered service in 1975. Unit #4 is utilized for electric power generation with a 620 MW nominal gross capacity.

Emissions from Unit #4 exit through two breachings to a stack known as Stack #4, which has an inside diameter of 24.6 feet and an AGL height of 425 feet.

1. #6 Fuel Oil Sulfur Content

In FPLE Wyman's BART license, A-388-77-2-M (11/2/2010), BART for SO_2 emissions from Unit #4 was determined to be limiting SO_2 emissions to

0.8 lb SO_2/MMBtu of heat input by firing #6 fuel oil with a sulfur content not to exceed 0.7%, by weight. Since then, 38 M.R.S. § 603-A(2)(A)(1) and (2) have been revised to prohibit the importation, distribution, or sale of any residual fuel, including #6 fuel oil, with a sulfur content that exceeds 0.5%, by weight. Therefore, the #6 fuel oil sulfur content BART requirement of 0.7% sulfur, by weight shall be streamlined to the limit in 38 M.R.S. § 603-A(2)(A)(1) and (2) of 0.5% sulfur, by weight.

The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018. [06-096 C.M.R. ch. 140, BPT]

2. Control Equipment

a. Particulate Matter

(1) FPLE Wyman shall control PM emissions from Unit #4 by use of an ESP. FPLE Wyman shall maintain the following records relating to the ESP [A-388-71-A-R (12/27/1995), BPT and A-388-70-A-I (10/2/2002), BPT]:

(i) A log of all maintenance performed on the ESP, as well as the nature of all failures and corrective action taken; and
(ii) A log of the voltage and current meter readings recorded at least once per 24-hour operating period.

(2) FPLE Wyman shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent demonstration of compliance with the licensed PM limits. [A-388-70-A-I (10/2/2002), BPT]

b. Nitrogen Oxides

FPLE Wyman shall operate a staged combustion system with flue gas recirculation to meet the NO_x emission limits for this unit. [A-388-71-A-R (12/27/1995), BPT; A-388-71-C-A (5/18/1995), NO_x RACT; and 06-096 C.M.R. ch. 145]

3. Startup/Shutdown

FPLE Wyman is required to operate Unit #4 such that the visible emissions do not exceed 20% opacity on a six-minute block average basis, except for one six-minute block average per hour of not more than 27% opacity except for periods of startup, shutdown, or malfunction per 40 C.F.R. §§ 60.11(c) and 60.42(a)(2). Facilities may establish site-specific work practices standards to demonstrate compliance during periods of startup, shutdown, malfunction.

Unit #4 utilizes an ESP for control of particulate matter emissions. When bringing Unit #4 online or offline, FPLE Wyman utilizes standard operating procedures that were created in accordance with manufacturer's recommendations to maintain the safety of the boiler operators and the unit itself. FPLE Wyman also operates the ESP in accordance with good engineering practices to maintain the safety of the operators and the ESP. In order to minimize the risk of fire or explosion, the ESP is not engaged unless the oxygen content of the exhaust gas is below 11%.

FPLE Wyman has proposed demonstrating compliance during periods of startup and shutdown by complying with site-specific work practice standards.

a. Definitions of Startup and Shutdown

For the purposes of this license, ***startup*** for Unit #4 is defined as a period of time commencing when fuel is first ignited in the unit and ending when the unit achieves steady state operation. The total duration of each startup period shall not exceed four (4) hours.

For the purposes of this license, ***shutdown*** for Unit #4 is defined as a period of time from steady state operation to the cessation of combustion in the unit. The total duration of each shutdown period shall not exceed four (4) hours.

b. Site-Specific Work Practice Standards

The following shall constitute site-specific work practice standards for periods of startup and shutdown as defined by this license:

(1) Adherence to the manufacturer's suggested standard operating procedures for startup and shutdown;
(2) Before startup, inspection of the ESP and ESP dust collection system equipment to ensure that the equipment is free of foreign matter and to ensure their proper function;
(3) During startup, engagement of the ESP as soon as it is deemed safe to do so in accordance with manufacturer's recommendations; and
(4) During shutdown, operation of the ESP for as long as it is deemed safe to do so in accordance with manufacturer's recommendations; and
(5) During startup and shutdown, soot blowing as soon as it deemed safe to do so in accordance with manufacturer's recommendations and not to commence while the ESP is not operational.

c. Monitoring During Startup/Shutdown

FPLE Wyman shall maintain records of startups and shutdowns that shall include dates, times, and duration, records of the pre-startup inspections of the ESP and ESP dust collection system, and time the ESP was engaged (during startup) or disengaged (during shutdown).

During all startups/shutdowns, FPLE Wyman shall continuously monitor the following items. FPLE Wyman shall record the monitored value at least once per hour. The records of hourly readings shall be included in the startup/shutdown record.
(1) Thermal oil temperature;
(2) ESP exit gas oxygen content; and
(3) Secondary voltage on each field of the ESP.

4. New Source Performance Standards (NSPS)

Unit #4 is subject to *Standards of Performance for Fossil-Fuel-Fired Steam Generators*, 40 C.F.R. Part 60, Subpart D. These Subpart applies to steam generating units with a heat input capacity of 250 MMBtu/hr or more that are constructed after August 17, 1971. [40 C.F.R. §§ 60.40(a)(1) and (c)]

The requirements of 40 C.F.R. Part 60, Subpart D applicable to Unit #4 include emission standards for PM, SO_2, NO_x, and visible emissions; and monitoring requirements for opacity and for SO_2 and NO_x emissions. These requirements are addressed in the following sections.

Subpart D also requires the following:

a. Testing Requirements

If requested to conduct a subsequent performance test by EPA and/or the Department, FPLE Wyman shall use the test methods and procedures in 40 C.F.R. § 60.46. [40 C.F.R. §§ 60.46(a), (b), and (d)]

b. Reporting Requirements

FPLE Wyman shall submit excess emission and monitoring system performance (MSP) reports to EPA and the Department semiannually for each six-month period in the calendar year. These reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in 40 C.F.R. § 60.7(c). Periods of excess emissions

and monitoring systems downtime that shall be reported are defined as follows [40 C.F.R. § 60.45(g)]:

(1) For opacity, excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20% opacity, except that one six-minute block average per hour of up to 27% opacity need not be reported; and
(2) For NO_x, excess emissions are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standard in 40 C.F.R. § 60.44(a)(2).

5. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Unit #4 is not subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters,* 40 C.F.R. Part 63, Subpart DDDDD. The unit is considered an EGU and is therefore considered exempt from this regulation. [40 C.F.R. § 63.7491(a)]

Unit #4 is subject to *NESHAP: Coal- and Oil-Fired Electric Utility Steam Generating Units,* 40 C.F.R. Part 63, Subpart UUUUU. The unit is considered an existing affected source that meets the definition of a limited-use liquid oil-fired EGU as defined in 40 C.F.R. § 63.10042. [40 C.F.R. §§ 63.9981, 63.9982(d), and 63.10042] The requirements of 40 C.F.R. Part 63, Subpart UUUUU applicable to Unit #4 were addressed earlier in this license.

6. Emission Limits and Streamlining

a. Criteria Pollutants

For Unit #4, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.20 lb/MMBtu	06-096 C.M.R. ch. 103, § 2.A.(1)	0.10 lb/MMBtu[1]
	0.10 lb/MMBtu	40 C.F.R. § 60.42(a)(1) & A-388-77-2-M (11/2/2010), BART	
	629.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	629.0 lb/hr
PM_{10}	629.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	629.0 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
SO_2	3,304.4 lb/hr (based on 0.5% #6 fuel oil, by weight) (3-hr block avg)	06-096 C.M.R. ch. 140, BPT	3,304.4 lb/hr (3-hr block avg)
	0.80 lb/MMBtu (3-hr rolling total)	40 C.F.R. § 60.43(a)(1) & A-388-77-2-M (11/2/2010), BART	0.80 lb/MMBtu (3-hr rolling total)
NO_x	0.30 lb/MMBtu (24-hr block avg)	06-096 C.M.R. ch. 138, § 3.A.(1)	0.30 lb/MMBtu[1] (3-hr rolling avg)
	0.30 lb/MMBtu (3-hr rolling avg)	40 C.F.R. § 60.44(a)(2)	
	0.170 lb/MMBtu (rolling 90-operating-day avg from Unit #4 alone)	A-388-77-2-M (11/2/2010), BART	0.170 lb/MMBtu (rolling 90-operating-day avg from Unit #4 alone)
	0.165 lb/MMBtu (rolling 90-operating-day avg if FPLE Wyman chooses to average emissions from Units #3 and #4)	A-388-77-2-M (11/2/2010), BART	0.165 lb/MMBtu (rolling 90-operating-day avg if FPLE Wyman chooses to average emissions from Units #3 and #4)
	1,887 lb/hr (24-hr block avg)	A-388-71-C-A (5/18/1995), NO_x RACT	1,887 lb/hr (24-hr block avg)
CO	31,450.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	31,450.0 lb/hr
VOC	629.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	629.0 lb/hr

[1] Streamlining requested

b. Visible Emissions

Unit #4 is exempt from the requirements of *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 because it is subject to a visible emissions standard under 40 C.F.R. Part 60, Subpart D. [06-096 C.M.R. ch. 101, § 1.C.(7)]

Visible emissions from Unit #4 shall not exceed 20% opacity on a six-minute block average basis except for one six-minute period per hour of not more than 27% opacity. These limits shall not apply during periods of startup, shutdown, and malfunction. [40 C.F.R. § 60.42(a)(2) and 40 C.F.R. § 60.11(c)]

7. Emission Limit Compliance Methods

Compliance with the emission limits associated with Unit #4 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five years from the date of the most recent previous stack test (1/24/2017)[1]
	lb/hr		
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/MMBtu	Fuel flow meter and fuel sampling and analysis[2]	Continuous (in accordance with 40 C.F.R. Part 75, App. D and F)
	lb/hr		
NO_X	lb/MMBtu	NO_x CEMS	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A and B)
	lb/hr		
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	COMS	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A and B)

[2] [38 M.R.S. § 589(2)]
[3] [40 C.F.R. §§ 60.45(a) and (b)(2)]

8. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following periodic monitoring values for Unit #4 and its associated air pollution control equipment whenever the equipment is operating.

Unit #4				
Value	Units of Measure	Monitoring Tool/Method	Frequency	
			Monitor	Record
#6 fuel oil use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
#6 fuel oil sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As delivered/ As analyzed	As delivered/ As analyzed
Distillate fuel use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As delivered/ As analyzed	As delivered/ As analyzed
Waste oil use	Gallons	Estimation of amount collected and burned	As Collected	Monthly and 12-month rolling total

Unit #4				
			Frequency	
Value	Units of Measure	Monitoring Tool/Method	Monitor	Record
Operating time	Hours	Boiler control system (DCS)	Continuously	Monthly and annually

ESP on Unit #4		
Records Maintained	Monitoring Tool/Method	Frequency
Documentation of maintenance, malfunctions, and downtime of the ESP	Logbook or electronic log	As each situation occurs

9. Parameter Monitors

During all operating times, FPLE Wyman shall operate, record data, and maintain records from the following parameter monitors for Unit #4 in accordance with FPLE Wyman's approved CAM plan [40 C.F.R. Part 64]:

Parameter	Frequency
ESP Secondary Voltage	Monitor: Continuously Record: Three-hour block average
ESP Secondary Current	Monitor: Continuously Record: Three-hour block average

10. Compliance Assurance Monitoring

FPLE Wyman shall meet the following CAM requirements for Unit #4:

Condition	ESP Total Secondary Power
Indicator	ESP secondary voltage and secondary current are measured for each field to determine the power to the ESP.
Measurement Method	FPLE Wyman shall monitor the ESP secondary voltage using a voltmeter and the ESP secondary current using an ammeter. The total power is calculated in the Precipitator Optimization System (POS).
Indicator Range	An excursion shall be defined as an ESP power input less than 700 kW. Excursions trigger an alarm (by the POS), an inspection, a corrective action, and a reporting requirement.

Date Representativeness	The voltage and current are measured using the instrumentation the manufacturer provided with the ESP. The POS collects and records the data and is used to generate reports.
QA/QC	FPLE Wyman shall confirm the meters read zero when Unit #4 is not operating.
Monitoring Frequency	FPLE Wyman shall measure the voltage and current continuously and shall use the data to calculate the power input every three hours.
Date Collection Procedure	FPLE Wyman's POS shall calculate and record the average power input.
Averaging Period	Three-hour block average.

11. CEMS and COMS

The table below lists the required CEMS and COMS for Unit #4.

Pollutant and Continuous Monitors	**Units**	**Averaging Period**	**Origin and Authority**
NO_x CEMS[1]	lb/MMBtu	3-hour rolling average	A-388-71-C-A (5/18/1995), NO_x RACT, 06-096 C.M.R. ch. 117, § 1.B.(2), 40 C.F.R. § 60.45(a), and 40 C.F.R. § 75.10(a)(2) and (a)(3)
	lb/hr	24-hour block average	
CO_2 CEMS	%	3-hour rolling average	40 C.F.R. § 60.45(b)(4), 06-096 C.M.R. ch. 117, § 1.B.(9), and 40 C.F.R. § 75.10(a)(3)(i)
Opacity COMS[2]	%	6-minute block average	40 C.F.R. § 60.45(a), 06-096 C.M.R. ch. 117, § 1.B.(1), and 40 C.F.R. § 75.10(a)(4)

[1] In addition to the NO_x CEMS, FPLE Wyman shall also operate a diluent gas monitor. [40 C.F.R. § 75.10(a)(2) and A-388-70-A-I (10/2/2002), BPT]

For performance evaluations under 40 C.F.R. § 60.13(c) and calibration checks under 40 C.F.R. § 60.13(d), FPLE Wyman shall use the following procedures [40 C.F.R. § 60.45(c)(1) and (2)]:

- FPLE Wyman shall use Methods 7 and 3B of 40 C.F.R. Part 60, Appendix A for the NO_x CEMS performance evaluations except as provided in 40 C.F.R. § 60.46(d); and
- FPLE Wyman shall use nitric oxide for preparing calibration gas mixtures under Performance Specification 2 (PS-2) of 40 C.F.R. Part 60, Appendix B.

The span value of the NO_x CEMS shall be set at 500 ppm. [40 C.F.R. § 60.45(c)(3)(i)]

For the NO_x CEMS, the conversion procedures included in 40 C.F.R. §§ 60.45(e) and (f) shall be used to convert the continuous monitoring data into lb/MMBtu. [40 C.F.R. §§ 60.45(e) and (f)]

[2] Unit #4 has a single COMS in the stack, not one in each breaching like Unit #3. The span value of the COMS shall be set at 80, 90, or 100 percent. [40 C.F.R. § 60.45(c)(3)]

N. Unit #5

Unit #5 is a Cleaver Brooks boiler with a maximum design heat input capacity of 72 MMBtu/hr. The unit is equipped with a single low-NO_x burner capable of firing #6 fuel oil at a rate of 480 gal/hr. Unit #5 was manufactured and installed in 1977 and is licensed to fire #6 fuel oil, specification waste oil, and distillate fuel. Unit #5 is utilized for building heat and auxiliary steam needs.

Emissions from Unit #5 may discharge through either Flue A of Stack #1, which has an inside diameter of 9.91 feet and an AGL height of 320 feet or Stack #5, which has an inside equivalent diameter of 3.8 feet and an AGL height of 115 feet.

1. Removal of Obsolete License Condition

   The following requirement was first established in Part 70 License A-388-70-A-I (10/2/2002) and amended for clarifying purposes in A-388-70-D-A (12/9/2005):

   > *For those time periods when emissions from Unit #5 are not discharged into Flue A of Stack #1, emissions from Unit #5 may be discharged to Stack #5 provided the SO_2 emission rate does not exceed 0.8 lb/MMBtu as demonstrated by records of fuel flow into Unit #5 and the sulfur content of the fuel being fired.*

   This requirement was established when the sulfur content of #6 fuel oil fired in Unit #5 was limited to 2.0% by weight, per requirements of 06-096 C.M.R. ch. 106 (Chapter 106) in effect at that time. Both state statute and Chapter 106 have since been updated to limit the sulfur content of #6 fuel oil imported, sold, or otherwise made available in Maine after July 1, 2018, to no greater than 0.5% sulfur by weight, and the sulfur content of distillate fuel oil to 0.0015% by weight.

   Because the new, lower sulfur content of fuel fired in Unit #5 makes it impossible to emit at levels as high as 0.8 lb/MMBtu, this license condition is outdated and obsolete and is hereby removed from the license.

2. Control Equipment

   Unit #5 is equipped with low-NO_x burners for control of NO_x emissions. [A-388-71-C-A (5/18/1995), NO_x RACT]

3. New Source Performance Standards (NSPS)

   Unit #5 is not subject to the NSPS titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc. These standards apply to steam generating units with a maximum heat input capacity between 10 MMBtu/hr and 100 MMBtu/hr that are constructed after June 9, 1989. Unit #5 was manufactured and installed at FPLE Wyman prior to the applicability date of 40 C.F.R. Part 60, Subpart Dc and is therefore not subject to that regulation. [40 C.F.R. § 60.40c(a)]

4. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   Unit #5 is subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, 40 C.F.R. Part 63, Subpart DDDDD. This subpart establishes national emission limitations and work practice standards for HAP emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. The unit is considered an existing boiler in the units designed to burn liquid fuel and units designed to burn heavy liquid fuel subcategories. [40 C.F.R. §§ 63.7480, 63.7485, 63.7490(a)(1) and (d), and 63.7499(q) and (t)]

   The requirements of 40 C.F.R. Part 63, Subpart DDDDD specifically applicable to Unit #5 are the following:

   a. Notification and Reporting Requirements

      (1) Initial Notification

      FPLE Wyman submitted the Initial Notification for Unit #5 to EPA and the Department on April 30, 2014. [40 C.F.R. §§ 63.7495(d) and 63.7545(b)]

      (2) Notification of Intent to Conduct a Performance Test

      FPLE Wyman shall submit a Notification of Intent to conduce a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. §§ 63.7495(d) and 63.7545(a) and (d)]

      (3) Performance Test Reports

      FPLE Wyman shall report the results of all performance tests and associated fuel analyses required under this subpart within 60 days after completion of a performance test. This report shall also verify that the operating limits for the

unit have not changed or provide documentation of revised operating limits established according to 40 C.F.R. § 63.7530 and Table 7 to this subpart, as applicable. The reports for all performance tests shall include all applicable information required in 40 C.F.R. § 63.7550 and shall be submitted to CEDRI according to the procedures in 40 C.F.R. § 63.7550(h).
[40 C.F.R. §§ 63.7515(f) and 63.7550(h)]

(4) Semiannual Reports

FPLE Wyman shall submit semiannual reports to EPA and the Department. These reports shall be submitted according to the dates established for semiannual reporting in this air emission license. These reports shall include the following information and shall be submitted in the following form [40 C.F.R. §§ 63.7550(a) through (e), 63.7550(h), 63.7540(b), & 40 C.F.R. Part 63, Subpart DDDDD, Table 9]:

(i) Required Information

Each semiannual compliance report shall contain the information required by 40 C.F.R. §§ 63.7540(b), 63.7550(c) through (e), and 40 C.F.R. Part 63, Subpart DDDDD, Table 9.

(ii) Submittal of Reports

FPLE Wyman shall submit the semi-annual compliance reports required by this subpart electronically to EPA and the Department via CEDRI according to the procedures listed in 40 C.F.R. § 63.7550(h).

b. Work Practice Standards

FPLE Wyman shall meet each work practice standard listed below for Unit #5. FPLE Wyman may petition EPA for use of alternative work practice standard(s). FPLE Wyman shall meet these work practice standards whenever Unit #5 is operating, except during periods of startup and shutdown, during which time FPLE Wyman shall comply only with the startup and shutdown work practice standards. [40 C.F.R. §§ 63.7500(a)(1), (b), and (f), 63.7505(a), and 63.7530(h)]

(1) Emission Minimization Requirement

At all time, FPLE Wyman shall operate and maintain Unit #5, including associated air pollution control and monitoring equipment, 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 administrator 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 source. [40 C.F.R. §§ 63.7500(a)(3) and 63.7505(a)]

(2) Startup and Shutdown

(a) Definitions of Startup and Shutdown [40 C.F.R. Part 63, § 63.7575]

Startup means the following: [definition (1) of "startup" in § 63.7575]

- Either the first-ever firing of fuel in Unit #5 for the purpose of supplying useful thermal energy for heating and/or producing electricity or for any other purpose, or the firing of fuel in Unit #5 for any purpose after a shutdown event. Startup ends when any of the useful thermal energy from the boiler is supplied for heating and/or producing electricity or for any other purpose; or
- [definition (2) of "startup" in § 63.7575] The period in which operation of Unit #5 is initiated for any purpose. Startup begins with either the first-ever firing of fuel in Unit #5 for the purpose of supplying useful thermal energy (such as steam or heat) for heating, cooling, or process purposes, or producing electricity, or the firing of fuel in Unit #5 for any purpose after a shutdown event. Startup ends four hours after when the boiler supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes, or generates electricity, whichever is earlier.

Shutdown means the period in which cessation of operation of Unit #5 is initiated for any purpose. Shutdown begins when the unit no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to Unit #5, whichever is earlier. Shutdown ends when Unit #5 no longer supplies useful thermal energy (such as steam or heat) for heating, cooling, or process purposes and/or generates electricity, and no fuel is being combusted in Unit #5.

(b) During <u>startup</u> of Unit #5, FPLE Wyman shall comply with the work practice standards listed in item 5 of 40 C.F.R. Part 63, Subpart DDDDD, Table 3, including the following:

(i) All required continuous monitoring systems (CMS) must be operated during startup.

(ii) Clean fuels as defined in this Subpart, such as distillate fuel, must be used for startup.

(iii) If FPLE Wyman chooses to comply using definition (1) of "startup in § 63.7575, once the firing of fuels that are not clean fuels commences, emissions must be vented to the main stack and all applicable control devices must be engaged.

If FPLE Wyman chooses to comply using definition (2) of "startup in § 63.7575, once the firing of fuels that are not clean fuels commences, emissions must be vented to the main stack and all applicable control devices must be engaged so as to comply with the emission limits within four hours of start of supplying useful thermal energy. A written startup and shutdown plan must be developed and implemented, as specified in § 63.7505(e).

[40 C.F.R. §§ 63.7505(a) and (e), and 63.7540(d) and 40 C.F.R. Part 63, Subpart DDDDD, Table 3]

(c) During shutdown of Unit #5, FPLE Wyman shall comply with the work practice standards listed in item 6 of 40 C.F.R. Part 63, Subpart DDDDD, Table 3, including the following:

(ii) All required CMS shall be operated during shutdown.

(iii) When firing fuels that are not clean fuels as defined by this Subpart, all emissions shall be vented to the main stack(s) and all applicable control devices operated.

(iv) If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, the additional fuel must be one or a combination of clean fuels, such as distillate fuel.

(v) Monitoring data shall be collected during periods of shutdown, as specified in § 63.7535(b). Records shall be maintained during periods of shutdown, and reports shall be provided concerning activities and periods of shutdown, as specified in § 63.7555.

[40 C.F.R. §§ 63.7505(a) and 63.7540(d) and 40 C.F.R. Part 63, Subpart DDDDD, Table 3]

(d) FPLE Wyman shall comply with all applicable emission limits of this Subpart at all times except during startup and shutdown periods, at which time these work practices shall be met. Monitoring data shall be collected during periods of startup, as specified in § 63.7535(b), and records

maintained. Reports shall be provided concerning activities and periods of startup, as specified in § 63.7555.

(3) Boiler Tune-ups

(i) Timing of Boiler Tune-ups

1. FPLE Wyman completed the initial tune-up of Unit #5 during the week ending October 1, 2016, and completed an additional burner inspection on December 21, 2016. [40 C.F.R. §§ 63.7495(b) and 63.7510(e)]

2. As a boiler with a continuous oxygen trim system that maintains an optimum air-to-fuel ratio, Unit #5 is subject to tune-ups on a five-year basis. Each subsequent tune-up of Unit #5 shall be conducted no more than 61 months after the date of the previous tune-up. FPLE Wyman may delay the burner inspection specified in 40 C.F.R. § 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the burner must be inspected at least once every 72 months. [40 C.F.R. §§ 63.7515(d) and 63.7540(a)(12) and 40 C.F.R. Part 63, Subpart DDDDD, Table 3]

3. If Unit #5 is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 C.F.R. § 63.7540(a)(13) and 63.7515(g)]

(ii) Boiler Tune-up Procedures

Each tune-up shall be conducted while burning the type of fuel (or fuels in the case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler over the five years prior to the tune-up according to the procedures in 40 C.F.R. § 63.7540(a)(10)(i) through (v). [40 C.F.R. § 63.7540(a)(10)(i) through (v)]

(iii) Boiler Tune-up Report

FPLE Wyman shall maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 C.F.R. § 63.7540(a)(10)(vi)(A) through (C) regarding each boiler tune-up. [40 C.F.R. § 63.7540(a)(10)(vi)]

(iv) Notification of Compliance Status

After completing the initial tune-up, FPLE Wyman submitted the Notification of Compliance Status to EPA on April 4, 2016. [40 C.F.R. § 63.7545(a) and (e)]

(4) Energy Assessment

(i) FPLE Wyman completed the energy assessment on Unit #5 between March 2015 and June 2015. [40 C.F.R. §§ 63.7495(b) and 63.7510(e) and 40 C.F.R. Part 63, Subpart DDDDD, Table 3]

(ii) After completing the energy assessment, FPLE Wyman submitted the Notification of Compliance Status to EPA on November 19, 2015. [40 C.F.R. §§ 63.7495(b), 63.7530(e), and 63.7545(a) and (e)]

c. Emission Limits, Fuel Analyses, and Performance Tests

(1) Emission Limits

FPLE Wyman shall meet the emission limits in 40 C.F.R. Part 63, Subpart DDDDD, Table 2 applicable to Unit #5 at all times the unit is operating, except during periods of startup and shutdown during which time the facility shall comply with only item 5 (for startups) or 6 (for shutdowns) of Table 3 of this Subpart. [40 C.F.R. §§ 63.7500(a)(1) and (f) and 63.7505(a) and (c) and 40 C.F.R. Part 63, Subpart DDDDD, Table 2]

Emission limits are those applicable to boilers firing liquid fuel and heavy liquid fuel and are included in the Emission Limits table in the following pages. Startup and shutdown requirements have been specified previously in this license.

(2) Fuel Analyses

For liquid fuels, FPLE Wyman shall conduct fuel analyses for chloride and mercury according to the following procedures and Table 6 to this subpart, as applicable. FPLE Wyman is not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability practices. [40 C.F.R. § 63.7521(a)]

(i) Fuel Pollutant Input Determination

1. FPLE Wyman shall determine the concentration of pollutants (mercury and chlorine) in the fuel in units of lb/MMBtu of each composite sample for each fuel type according to the procedures in 40 C.F.R. § 63.7521(e) and Table 6 of this subpart. [40 C.F.R. § 63.7521(e)]

2. FPLE Wyman shall establish maximum fuel pollutant input levels for chlorine (Clinput) and mercury (Mercuryinput) according to the procedures in 40 C.F.R. § 63.7530(b). [40 C.F.R. § 63.7530(b)]

(ii) Site-Specific Fuel Monitoring Plan

FPLE Wyman shall maintain a site-specific fuel monitoring plan according to the procedures and requirements in 40 C.F.R. § 63.7521(b)(1) and (2). [40 C.F.R. § 63.7521(b)]

(iii)Fuel Switching

If FPLE Wyman plans to burn a new type of fuel or a mixture of fuels, the facility shall demonstrate compliance with Unit #5's HCl and mercury emission limits according to the procedures in 40 C.F.R. § 63.7540(a)(4) and (6), respectively. [40 C.F.R. § 63.7540(a)(4) and (6)]

(3) Performance Tests

(i) Initial Performance Tests

For Unit #5, the initial performance test requirements for the unit's emission limits included the following [40 C.F.R. §§ 63.7495(b) and (d), 63.7505(d)(3), 63.7510(a) and (c) through (e), 63.7520(c), 63.7530(a) and (f), and 63.7545(a) and (e)]:

1. Conduct a fuel analysis for each type of fuel burned in Unit #5 according to 40 C.F.R. § 63.7521 and Table 6 to this subpart. FPLE Wyman conducted these fuel analyses on August 26, 2016;

2. Conduct performance tests according to 40 C.F.R. § 63.7520 and Table 5 to this subpart. FPLE Wyman conducted successful initial performance tests for HCl, Hg, CO, and PM on October 12, 2016, and completed successful follow-up performance tests on September 20 and 21, 2017;

3. Establish operating limits for minimum oxygen level according to § 63.7520 and unit-specific limit for maximum operating load according to § 63.7520(c), as required by 40 C.F.R. § 63.7530 and Table 7 to this Subpart. FPLE Wyman set initial operating limits after the performance tests conducted on October 12, 2016;

4. Conduct CMS performance evaluations for each CMS in accordance with the facility's site-specific monitoring plan and 40 C.F.R. § 63.7525; and

5. After completion of the above requirements, FPLE Wyman submitted the Notification of Compliance Status to EPA and the Department on November 2, 2016, containing the information listed in 40 C.F.R. § 63.7545(e)(1) through (8).

(ii) Timing of Performance Tests

Subsequent performance tests for Unit #5 shall be conducted on an annual basis, with each subsequent test completed no more than 13 months after the previous performance test, except as specified in 40 C.F.R. § 63.7515(a) through (c). [40 C.F.R. § 63.7515(a) through (c)]

(iii) Conduct of Performance Tests

FPLE Wyman shall develop a site-specific stack test plan according to the requirements in 40 C.F.R. § 63.7(c) and shall conduct all performance tests according to the specific conditions and requirements of 40 C.F.R. § 63.7(c-d), (f), and (h), 40 C.F.R. § 63.7520(a) through (f), and Tables 5 and 7 of this subpart. [40 C.F.R. § 63.7520(a-f)]

d. Monitoring and Recordkeeping Requirements

(1) Operating Limits and Continuous Compliance Requirements

(i) Establishment of Operating Limits

FPLE Wyman shall establish operating limits and, if applicable, install, operate, and maintain all applicable CMS (including CPMS) according to 40 C.F.R. § 63.7525. If FPLE Wyman wishes to establish and monitor an alternative operating limit or alternative operating parameter, the facility shall apply to the EPA Administrator for approval under 40 C.F.R. § 63.8(f). FPLE Wyman shall meet each operating limit at all times Unit #5 is operating, except during periods of startup and shutdown, during which

time the facility shall comply with only items 5 (for startups) and 6 (for shutdowns) of Table 3 of this subpart. The operating limits required for Unit #5 and its associated air pollution control equipment are as follows [40 C.F.R. §§ 63.7500(a)(2) and (f), 63.7505(a), 63.7525(a)(7), 63.7530(a) and (b), and 40 C.F.R. Part 63, Subpart DDDDD, Tables 4 & 7]:

1. Oxygen Trim System

   FPLE Wyman shall set the oxygen level on Unit #5's oxygen trim system no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 to this subpart.

2. Maximum Boiler Operating Load

   FPLE Wyman shall establish a maximum boiler operating load operating limit as the highest hourly average operating load recorded during the facility's performance tests according to the requirements in item 5 of 40 C.F.R. Part 63, Subpart DDDDD, Table 7.

(ii) Demonstrating Continuous Compliance

Operation above any established maximum operating limit shall constitute a deviation of established operating limits except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits shall be confirmed or reestablished during performance tests. FPLE Wyman shall demonstrate continuous compliance with the boiler operating load operating limit according to the applicable procedures in 40 C.F.R. Part 63, Subpart DDDDD, Table 8. FPLE Wyman shall demonstrate continuous compliance with the minimum oxygen level operating limit by operating Unit #5's oxygen trim system at the level required by 40 C.F.R. § 63.7525(a)(7). [40 C.F.R. §§ 63.7505(c), 63.7525(a), & 63.7540(a)(1), and 40 C.F.R. Part 63, Subpart DDDDD, Table 8]

(2) Monitoring Equipment

For each operating limit that requires the use of a CMS, FPLE Wyman shall install, operate, and maintain each CMS according to the procedures in 40 C.F.R. § 63.7525(d). [40 C.F.R. § 63.7525(d)]

(3) Data Collection

FPLE Wyman shall monitor and collect CMS data (including CPMS data) according to the facility's site-specific monitoring plan as required by 40 C.F.R. § 63.7505(d) and the requirements in 40 C.F.R. § 63.7535(a) through (d). [40 C.F.R. § 63.7535(a) through (d)]

(4) Site-Specific Monitoring Plan

(i) FPLE Wyman shall develop a site-specific monitoring plan for each CMS (including CPMS) required for compliance with this subpart's operating limits according to the procedures in 40 C.F.R. § 63.7505(d)(1) and (d)(2). [40 C.F.R. § 63.7505(d)(1) and (2)]

(ii) FPLE Wyman shall conduct a performance evaluation of each CMS (including CPMS) in accordance with the facility's site-specific monitoring plan. [40 C.F.R. § 63.7505(d)(3)]

(iii) FPLE Wyman shall operate and maintain each CMS (including CPMS) in continuous operation according to the facility's site-specific monitoring plan. [40 C.F.R. § 63.7505(d)(4)]

(5) Recordkeeping Requirements

(i) FPLE Wyman shall maintain all records required by 40 C.F.R. § 63.7555(a) through (d) and 40 C.F.R. Part 63, Subpart DDDDD, Table 8. [40 C.F.R. §§ 63.7540(a)(2) and 63.7555]

(ii) These records, including all reports and notifications required by this subpart, shall be in a form suitable and readily available for expeditious inspection and review, according to 40 C.F.R. § 63.10(b)(1). [40 C.F.R. § 63.7560(a)]

e. Fuel Switching

If FPLE Wyman switches fuels or makes a physical change to Unit #5 that results in the applicability of a different subcategory consistent with 40 C.F.R. § 63.7545(h), FPLE Wyman shall apply to amend their air emission license to address the changes including applicable requirements of Subpart DDDDD.

5. Emission Limits and Streamlining

a. Criteria Pollutants

For Unit #5, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.20 lb/MMBtu	06-096 C.M.R. ch. 103, § 2.A.(1)	0.062 lb/MMBtu[1]
	0.062 lb/MMBtu	40 C.F.R. Part 63, Subpart DDDDD, Table 2, § 15.	
	14.4 lb/hr	A-388-71-A-R (12/27/1995), BPT	14.4 lb/hr
PM_{10}	14.4 lb/hr	A-388-71-A-R (12/27/1995), BPT	14.4 lb/hr
SO_2	37.8 lb/hr (based on 0.5% sulfur #6 fuel oil, by weight)	06-096 C.M.R. ch. 140, BPT	37.8 lb/hr
NO_x	0.35 lb/MMBtu	A-388-71-C-A (5/18/1995), NO_x RACT	0.35 lb/MMBtu
	25.2 lb/hr		25.2 lb/hr
CO	36.0 lb/hr	A-388-71-A-R (12/27/1995), BPT	36.0 lb/hr
	130 ppmdv corrected to 3% O_2	40 C.F.R. Part 63, Subpart DDDDD, Table 2, § 15.	130 ppmdv corrected to 3% O_2
VOC	7.2 lb/hr	A-388-71-A-R (12/27/1995), BPT	7.2 lb/hr
HCl	0.0011 lb/MMBtu	40 C.F.R. Part 63, Subpart DDDDD, Table 2, § 14.	0.0011 lb/MMBtu
Hg	2.0 x 10^{-6} lb/MMBtu	40 C.F.R. Part 63, Subpart DDDDD, Table 2, § 14.	2.0 x 10^{-6} lb/MMBtu

1. Streamlining requested

b. Visible Emissions [06-096 C.M.R. ch. 101, § 3.A.(1)(a)]

Visible emissions from Unit #5 shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, and malfunction, during which times FPLE Wyman may elect to comply with the following work practice standards in lieu of this numerical visible emissions limit:

(1) FPLE Wyman shall maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for the unit.

(2) FPLE Wyman shall develop and implement a written startup and shutdown plan for Unit #5.

(3) The duration of unit startups, shutdowns, or malfunctions shall each not exceed one hour per occurrence.

(4) Unit #5 shall be operated 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.

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with Unit #5 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every other year, but no more than 13 months from the previous test unless performance tests for two consecutive years show emissions at or below 75% of the limit in Subpart DDDDD, at which point the facility may elect to test every other year unless there are changes in operation of Unit #5 that could increase emissions or the facility tests above 75% of the limit, at which point the facility must begin testing every year again until there are two consecutive tests below 75% of the limit
	lb/hr		
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Method 201 or 201A	As requested
SO_2	lb/hr	Fuel flow meter[1] and 40 C.F.R. Part 75, App. D data obtained from Unit #1 or Unit #2	Continuous (in accordance with 40 C.F.R. Part 75, App. D and F)
NO_X	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 7	Once every two calendar years by May 31st of the second year
	lb/hr		

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
	ppmdv		Once every year, but no more than 13 months from the previous test, or otherwise in accordance with 40 C.F.R. Part 63, Subpart DDDDD [2]
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
HCl	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 26 or 26A	Once every year, but no more than 13 months from the previous test, or otherwise in accordance with 40 C.F.R. Part 63, Subpart DDDDD[2]
Hg	lb/MMBtu	40 C.F.R. Part 60, App. A, Methods 29, 30A, or 30 B; 40 C.F.R. Part 61, App. B, Method 101A; or ASTM Method D6784	Once every year, but no more than 13 months from the previous test, or otherwise in accordance with 40 C.F.R. Part 63, Subpart DDDDD[2]
Visible Emissions	% opacity, 6-min. block avg basis	40 C.F.R. Part 60, App. A, Method 9	As requested

[1] The fuel flow monitor shall continuously monitor and record the rate of fuel oil fired into and combusted within the unit. The fuel flow monitor system shall be maintained and operated in accordance with the manufacturer's specifications. [A-388-70-A-I (10/2/2002), BPT]

[2] In accordance with 40 C.F.R. § 63.7515, if performance tests for a given pollutant for at least two consecutive years show emissions at or below 75% of the 40 C.F.R. Part 63, Subpart DDDDD emission limit for that pollutant, and if there are no changes in the operation of the boiler or air pollution control equipment that could increase emissions, FPLE Wyman may opt to conduct performance testing every third year on this unit. If Such option and conditions shall be in accordance with the requirements and specifications of 40 C.F.R. § 63.7515.

7. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following period monitoring values for Unit #5 and its associated air pollution control equipment whenever the equipment is operating.

Unit #5				
Value	Units of Measure	Monitoring Tool/Method	Frequency	
			Monitor	Record
#6 fuel oil use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
#6 fuel oil sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As Delivered/ As Analyzed	As Delivered/ As Analyzed
Distillate fuel use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As Delivered/ As Analyzed	As Delivered/ As Analyzed
Waste oil use	Gallons	Estimation of amount collected and burned	As Collected	Monthly and 12-month rolling total
Operating time	Hours	Boiler control system (DCS)	Continuously	Monthly and annually

8. Parameter Monitors

During all operating times, FPLE Wyman shall continuously operate, record data, and maintain records from the following parameter monitors for Unit #5:

Parameter	Averaging Period	Origin and Authority
Boiler operating load	30-day rolling average	40 C.F.R. § 63.7525(d) and 40 C.F.R. Part 63, Subpart DDDDD, Table 4, Row 7

9. CEMS and COMS

No CEMS or COMS are required for Unit #5.

O. Diesel Generator

FPLE Wyman operates the Diesel Generator as an emergency generator. The Diesel Generator is a generator set consisting of an engine, rated at 5.25 MMBtu/hr (600 kW output) which fires distillate fuel, and an electrical generator. The Diesel Generator was manufactured in 1974 and installed at the facility in 1975.

The Diesel Generator shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. This requirement shall supersede the previous operating limit of 925 hours/year of total operation, based on a 12-month rolling total. The Diesel Generator shall be equipped with a non-resettable hour-meter to record operating time. To demonstrate

compliance with the operating hours limit, FPLE Wyman shall keep records of the total hours of operation and the hours of emergency operation for each unit.

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 used to supply power to an electric grid as part of a financial arrangement with an independent system operator (ISO) or another entity.

1. Fuel Sulfur Content

   The distillate fuel fired in the Diesel Generator shall not exceed a sulfur content of 0.0015%, by weight (15 ppm). Compliance with this 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.

2. Control Equipment

   The Diesel Generator is not required to have any add-on control equipment.

3. New Source Performance Standards (NSPS)

   Due to the date of manufacture of the Diesel Generator, the unit is not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE),* 40 C.F.R. Part 60, Subpart IIII, since the unit was manufactured prior to July 11, 2005. [40 C.F.R. § 60.4200]

4. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 C.F.R. Part 63, Subpart ZZZZ is applicable to the Diesel Generator. The unit is considered an existing, emergency stationary reciprocating internal combustion engine (RICE) at a major HAP source and is not subject to New Source Performance Standards regulations. 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 this unit from the federal requirements.
   [40 C.F.R. §§ 63.6585(a) and (b) and 63.6590(a)(1)(i)]

   a. Emergency Engine Designation and Operating Criteria

      Under Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (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 Subpart ZZZZ, 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 RICE 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.

The Diesel Generator shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as an existing emergency stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause this engine to not be considered an emergency engine and therefore subject to all applicable requirements for non-emergency engines.

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

Although the Diesel Generator otherwise meets the applicability requirements of 40 C.F.R. Part 63, Subpart ZZZZ, the regulation states that existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 C.F.R. § 63.6640(f)(2)(ii) and (iii) are considered stationary RICE subject to limited requirements and therefore do not have to meet the requirements of this subpart and of Subpart A of 40 C.F.R. Part 63, including initial notification requirement. At this time, no additional federal requirements are included in this license for the Diesel Generator. [40 C.F.R. § 63.6590(b)(3)(iii)]

5. Emission Limits and Streamlining

a. Criteria Pollutants

For the Diesel Generator, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a one-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.2 lb/MMBtu	06-096 C.M.R. ch. 103 § 2.A.(1)	0.2 lb/MMBtu
	1.1 lb/hr	A-388-70-A-I (10/2/2002), BPT	1.1 lb/hr
PM_{10}	1.1 lb/hr	A-388-70-A-I (10/2/2002), BPT	1.1 lb/hr
SO_2	0.01 lb/hr (based on 0.0015% sulfur limit, by weight)	06-096 C.M.R. ch. 140, BPT	0.01 lb/hr
NO_X	16.8 lb/hr	A-388-70-E-R (4/26/2012), BPT	16.8 lb/hr
CO	4.5 lb/hr	06-096 C.M.R. ch. 140, BPT	4.5 lb/hr
VOC	0.5 lb/hr	A-388-70-E-R (4/26/2012), BPT	0.5 lb/hr

b. Visible Emissions

Visible emissions from the Diesel Generator shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time FPLE Wyman may elect to comply with the following work practice standards in lieu of this visible emission standard: [06-096 C.M.R. ch. 101, § 3.A.(4)(a)]

(1) Maintain a log (written or electronic) of the date, time, and duration of all generator startups.

(2) Operate the generator 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) At all times, operate the generator, including any associated air pollution control equipment, 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.

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Diesel Generator shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

7. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following periodic monitoring values from the following periodic monitors for the Diesel Generator whenever the equipment is operating.

Value	Units of Measure	Monitoring Tool/Method	Frequency
Fuel oil sulfur content	Percent, by weight	Fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired	As fuel is purchased or delivered
Operating time	Hours	Hour Meter	Monthly and annually
Type of Operation (emergency, maintenance, etc.)	N/A	Recorded electronically or in logbook	As occurs

8. Parameter Monitors

   No parameter monitors are required for the Diesel Generator.

9. CEMS and COMS

   No CEMS or COMS are required for the Diesel Generator.

P. Portable Engines

FPLE Wyman may operate portable engines on-site for maintenance and emergency-only purposes. Depending on their size and age, these engines may be subject to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 and *Fuel Burning Equipment Particulate Emission Standard*, 06-096 C.M.R. ch. 103.

Any engine which cannot meet the definition of "portable engine" as defined by this license may be subject to additional State and Federal regulations. A license amendment may be necessary for a portable engine to be reclassified as stationary.

Q. Specification Waste Oil [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

For all specification waste oil burned at the facility, FPLE Wyman shall comply with the following:

1. Maintain records of at least one on-site generated waste oil characterization test result;

2. Maintain characterization test result records for all off-site generated specification waste oil fired;

3. Maintain a log recording the quantity of all specification waste oil burned in each unit; and

4. Make all logs available to the Department upon request.

R. Industrial Cleaning Solvents

FPLE Wyman uses industrial cleaning solvents in cleaning activities as those terms are defined in *Industrial Cleaning Solvents,* 06-096 C.M.R. ch. 166. The potential to emit from these activities (before control) is less than 3.0 tons of VOC per year.

FPLE Wyman is exempt from the requirement of the rule per Section (3)(I) and shall maintain records of material purchase or use records sufficient to verify that less than 55 gallons of industrial cleaning solvent is used per calendar year.

S. Parts Washers

The three parts washers at FPLE Wyman have design capacities of between 35 and 45 gallons each. Based on the solvent used, the parts washers are subject to *Solvent Degreasers,* 06-096 C.M.R. ch. 130.

This equipment is exempt from *Industrial Cleaning Solvents,* 06-096 C.M.R. ch. 166 per Section (3)(B).

Periodic monitoring for the parts washers shall consist of recordkeeping including records of solvent added and removed.

T. Additional Annual Compliance Addendum

FPLE Wyman shall submit an annual NO_x minimization update to the Department as an addendum to the annual compliance certification. The submittal shall list any one-time or ongoing activities at the facility performed in the previous calendar year to decrease NO_x emissions and increase the units' efficiency. [A-388-70-C-A (9/26/2007), BPT]

U. Emission Statements

FPLE Wyman is subject to emissions inventory requirements contained in *Emission Statements,* 06-096 C.M.R. ch. 137. FPLE Wyman shall maintain the following records in order to comply with this rule:

1. The amount of #6 fuel oil fired in Units #1-5 (each) on a monthly basis;

2. The amount of distillate fuel fired in Units #3-5 and the Diesel Generator (each) on a monthly basis;

3. The amount of specification waste oil fired in Units #1-5 (each) on a monthly basis;

4. Records of CEMS data and stack tests, as required;

5. The sulfur content of the #6 fuel oil fired in Units #1-5;

6. The sulfur content of the distillate fuel fired in Units #3-5 and the Diesel Generator; and

7. Hours each emission unit was operating on a monthly basis.

In reporting year 2020 and every third year thereafter, FPLE Wyman shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. FPLE Wyman shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

V. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a 5-minute block average basis. [06-096 C.M.R. ch. 101, § 3.C.]

W. General Process Sources

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3.B.(4)]

X. CEMS Recordkeeping

FPLE Wyman shall meet the following requirements for each CEMS and COMS required by this air emission license: [06-096 C.M.R. ch. 117 and 40 C.F.R. Part 60]

1. All CEMS and COMS required by this license shall meet the sampling and performance criteria specified in 40 C.F.R. Part 51, Subpart P, and shall be operated in accordance with the appropriate requirements of 40 C.F.R. Part 60, Appendix F, and 06-096 C.M.R. ch. 117, including the following:

    a. Conducting Relative Accuracy Testing Audits (RATA) and/or Performance Audits in accordance with 06-096 C.M.R. ch. 117. FPLE Wyman shall verbally notify the Department 10 calendar days prior to conducting the CEMS and COMS audits. This notification shall also apply to all linearity audits as required by

40 C.F.R. Part 75, which shall be conducted rather than cylinder gas audits (CGA) due to the more stringent requirements of 40 C.F.R. Part 75;

b. Developing and maintaining an updated quality assurance plan for all CEMS and COMS in accordance with 40 C.F.R. Part 60, Appendix F and 06-096C.M.R. ch. 117; and

c. Meeting the data recovery requirements of 06-096 C.M.R. ch. 117.

2. For all of the CEMS and COMS required by this license, the licensee shall maintain records of the most current six-year period. These records shall include the following information:

a. Documentation which shows monitor operational status during all source operating time, including specifics for calibrations and audits [06-096 C.M.R. ch. 117];

b. Documentation that all CEMS and COMS are continuously accurate, reliable, and are operated in accordance with 06-096 C.M.R. ch. 117, 40 C.F.R. Part 51, Appendix P, and 40 C.F.R. Part 60, Appendices B and F
[06-096 C.M.R. ch. 117 and 40 C.F.R. Parts 51 and 60];

c. Complete data sets of all monitored emissions as specified in this license [06-096 C.M.R. ch. 117];

d. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 C.F.R. Part 51, Appendix P [06-096 C.M.R. ch. 117 and 40 C.F.R. Part 51]; and

e. Other data indicative of compliance with the applicable emission standards for those periods when the CEMS or COMS were not in operation or produced invalid data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard. [06-096 C.M.R. ch. 140, BPT]

3. In order to meet the requirements of 40 C.F.R. Part 75, all CEMS and COMS, including fuel flow monitors, shall be in operation and monitoring unit emissions or opacity at all times the affected unit combusts any fuel except during periods of calibration, quality assurance, or preventative maintenance performed pursuant to 40 C.F.R. § 75.21 and Appendix B, periods of repair, periods of backup of data from the data acquisition and handling system, or periods of recertification performed pursuant to 40 C.F.R. § 75.20. [40 C.F.R. Part 75]

Y. Acid Rain Program

FPLE Wyman is subject to EPA's Acid Rain Program. The requirements applicable to FPLE Wyman are as follows:

1. Units #1-#4 are all subject to and shall comply with all applicable requirements of the Acid Rain Program under 40 C.F.R. Parts 72, 73, 75 (Subparts A, B, C, D, F, and G), 77, and 78. [40 C.F.R. § 72.6(a)(1)]

2. FPLE Wyman shall maintain the following records on an hourly basis for Units #1-#4 (each) pursuant to 40 C.F.R. Part 75 [40 C.F.R. Part 75, Subpart F]:

   a. Heat input;
   b. Operating time;
   c. Load and load range;
   d. Date and hour (and minute for opacity) for each recorded value;
   e. For SO_2:
      (1) Hourly flow rate of oil (bbl/hr);
      (2) Sulfur content (%) from bulk storage tanks;
      (3) Method of oil sampling;
      (4) Mass of oil combusted each hour (lb/hr); and
      (5) Hourly SO_2 mass emissions (lb/hr).

   f. For NO_x:
      (1) Concentration (ppm);
      (2) Diluent gas concentration ($\%O_2$ or $\%CO_2$);
      (3) Emission rate (lb/MMBtu); and
      (4) Method of determination for hourly average NO_x emission rate.

   g. For CO_2:
      (1) Concentration (%);
      (2) 40 C.F.R. Part 75, Appendix G (mass emissions in tons based on fuel oil analysis); and
      (3) Mass emissions (tons/hr).

   h. For opacity:
      (1) Average opacity for each six-minute averaging period; and
      (2) Exceedances.

   i. All monitor % data availability;
   j. Data and information required by 40 C.F.R. § 75.55 for specific situations; and
   k. Certification test data and information required in 40 C.F.R. § 75.56.

3. FPLE Wyman shall submit a quarterly electronic data report (EDR) to EPA pursuant to 40 C.F.R. Part 75 for Units #1-#4. [40 C.F.R. Part 75, Subpart G]

Z. Facility Annual Emissions

The table below provides an estimate of facility-wide potential emissions, based on a 12-month rolling total, from the emission sources addressed in this license for the purposes of quantifying future license fees. The tons per year limits were calculated based on the following:

- Operating Units #1-5 for 8,760 hours/year (each)
- Operating the Diesel Generator for 100 hours/year

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
Unit #1	551.88	551.88	1,449.60	1,241.73	1,379.70	275.94
Unit #2	551.88	551.88	1,449.60	1,241.73	1,379.70	275.94
Unit #3	1,042.44	1,042.44	2,738.14	1,564.97	2,606.10	521.22
Unit #4	2,755.02	2,755.02	14,473.04	8,265.06	137,751.00	2,755.02
Unit #5	63.07	63.07	165.67	110.38	157.68	31.54
Diesel Generator	0.05	0.05	0.01	0.84	0.22	0.02
Total TPY	**4,964.2**	**4,964.2**	**20,276.1**	**12,424.7**	**143,274.4**	**3,859.7**

III. AMBIENT AIR QUALITY ANALYSIS

FPLE Wyman previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-388-71-D-M, issued on February 16, 1996). An additional ambient air quality analysis is not required for this Part 70 License.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-388-70-G-R pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of 06-096 C.M.R. ch. 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to FPLE Wyman pursuant to the Department's preconstruction permitting requirements have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous, or otherwise environmentally insignificant, as explained in the Findings of Fact accompanying this Order. As such, the conditions in this license supersede all previously issued air license conditions.
Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each standard and specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

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 STATEMENTS

(1) 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. 140]

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 140]

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 C.M.R. ch. 140]

(4) 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. 140]

(5) Notwithstanding any other provision 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. 140]

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated June 23, 2016.

Permit Shield Table

Source	Citation	Description	Basis for Determination
Units #1-3	40 C.F.R. Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators	Units commenced construction prior to the applicability date of August 17, 1971
Unit #5	40 C.F.R. Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators	Maximum heat input of unit is less than the applicability threshold of 250 MMBtu/hr
Diesel Generator	06-096 C.M.R. ch. 138	NO_x RACT	Unit is exempt per 06-096 C.M.R. ch. 138, § 1.B.(2)
Units #1-#4	40 C.F.R. Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generating Units	Units commenced construction prior to the applicability date of September 18, 1978
Unit #5 and Diesel Generator	40 C.F.R. Part 72	Acid Rain Program	Units are exempt per 40 C.F.R. § 72.6(b)(8)
Unit #5	06-096 C.M.R. ch. 145	NO_x Control Program	Maximum heat input of unit is less than the applicability threshold of 250 MMBtu/hr

[06-096 C.M.R. ch. 140]

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of three or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 C.M.R. ch. 140;

B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 C.M.R. ch. 140]

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading, and other similar programs or processes for changes that are provided for in the Part 70 license. [06-096 C.M.R. ch. 140]

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 and this license (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 140. [06-096 C.M.R. ch. 140]

(3) 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. 140] **Enforceable by State-only**

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S. § 353-A.

(5) The licensee shall maintain and operate all emission units and air pollution control 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. 140] **Enforceable by State-only**

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 C.M.R. ch. 140]

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, 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 the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 C.M.R. ch. 140]

(8) 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 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;
2. To demonstrate compliance with the applicable emission standards; or
3. 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. 140] **Enforceable by State-only**

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates 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. 140] **Enforceable by State-only**

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 M.R.S.A. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design, or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 C.M.R. ch. 140]

(11) Upon the written request of 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 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. 140]

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [06-096 C.M.R. ch. 140]

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
B. The compliance status;
C. Whether compliance was continuous or intermittent;
D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
E. Such other facts as the Department may require to determine the compliance status of the source.

[06-096 C.M.R. ch. 140]

SPECIFIC CONDITIONS

(14) ***NESHAP: Coal- and Oil-Fired Electric Utility Steam Generating Units,* 40 C.F.R. Part 63, Subpart UUUUU**

FPLE Wyman shall comply with all requirements of Subpart UUUUU applicable to Units #1 - #4, including the following:

A. General Requirements

1. At all times FPLE Wyman shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, 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 shall be based on information available to the Department and/or EPA 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. [40 C.F.R. § 63.10000(b)]

2. Should any of Units #1-#4 at FPLE Wyman cease to meet the definition of the limited-use liquid oil-fired subcategory, FPLE Wyman shall be in compliance with all requirements applicable to existing continental liquid oil-fired EGUs on the effective date of the switch and shall demonstrate compliance with those requirements within 180 days after that unit/those units exceed the 8% capacity factor threshold. Additionally, FPLE Wyman shall send a notification to EPA and the Department within 15 days of a unit's change in applicable subcategory under the rule. [40 C.F.R. §§ 63.9(j), 63.9984(c) and (f), and 63.9990(b)(1)]

B. Work Practice Requirements

1. A boiler performance tune-up program shall be implemented. [40 C.F.R. §§ 63.9991(a)(1) and 63.10000(c)(2)(iv) and (e) and 40 C.F.R. Part 63, Subpart UUUUU, Tables 3 and 7]

2. Each performance tune-up shall be conducted no more than 36 calendar months after the previous performance tune-up unless neural network combustion optimization software is employed, in which case each performance tune-up shall be conducted no more than 48 calendar months after the previous performance tune-up. [40 C.F.R. §§ 63.10006(i) and 63.10021(e) and 40 C.F.R. Part 63, Subpart UUUUU, Table 3, Item 1]

3. The boiler performance tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

   a. As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows:
   [40 C.F.R. § 63.10021(e)(1)]
      (1) Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO must be installed within three calendar months after the burner inspection; and
      (2) Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the operator.

   b. As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type. [40 C.F.R. § 63.10021(e)(2)]

c. As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors. [40 C.F.R. § 63.10021(e)(4)]

d. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O_2 probes and/or sensors, adjusting the overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary. [40 C.F.R. § 63.10021(e)(5)]

e. Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles. [40 C.F.R. § 63.10021(e)(6)]

f. While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). You may use portable CO, NO_x and O_2 monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system. [40 C.F.R. § 63.10021(e)(7)]

g. If a unit is offline when a deadline to perform the performance tune-up passes, FPLE Wyman shall perform the performance tune-up work practice requirements within 30 days after the re-start of the affected unit. [40 C.F.R. § 63.10021(e)]

4. Tune-Up Report: A tune-up report shall be maintained on-site and, if requested, submitted to EPA and the Department. This report shall contain the following information [40 C.F.R. § 63.10021(e)(8)]:

a. The concentrations of CO and NOx in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion system;

b. A description of any corrective actions taken as a part of the combustion adjustment; and

c. The types and amounts of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period.

5. FPLE Wyman shall report the dates of each tune-up to EPA in hard copy, as specified in 40 C.F.R. § 63.10031(f)(5), through June 30, 2020. On or after July 1, 2020, FPLE Wyman shall report the date of all tune-ups electronically, in accordance with 40 C.F.R. § 63.10031(f). The tune-up report date is the date when the tune-up requirements in 40 C.F.R. § 63.10021(e)(6) and (7) are completed. [40 C.F.R. § 63.10021(e)(9)]

C. Reporting and Recordkeeping Requirements

1. Reporting Requirements

a. FPLE Wyman shall submit a semiannual compliance report to EPA and the Department according to the dates required by 06-096 C.M.R. ch. 140 and included in this license. The semiannual compliance report shall contain the following information [40 C.F.R. §§ 63.10021(f) and (g) and 63.10031(a) through (c) and (g) and 40 C.F.R. Part 63, Subpart UUUUU, Table 8]:
   (1) The information required by the summary report located in 40 C.F.R. § 63.10(e)(3)(vi);
   (2) Indication of whether any new types of fuel were burned during the reporting period;
   (3) The date of the most recent tune-up for each EGU, which is the date the tune up provisions specified in 40 C.F.R. §§ 63.10021(e)(6) and (7) were completed;
   (4) A certification;
   (5) If FPLE Wyman has a deviation from any work practice standard, the facility shall also submit a brief description of the deviation, duration of the deviation, emissions point identification, and the cause of the deviation; and
   (6) If FPLE Wyman had a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description of each type of malfunction which occurred during the reporting

period and which caused or may have caused any applicable emission limitation to be exceeded.

b. Prior to July 1, 2020, FPLE Wyman shall mail a hard copy of the semiannual compliance report to EPA. On or after July 1, 2020, FPLE Wyman shall submit the semiannual compliance report to EPA's WebFIRE database by using CEDRI, which is accessed through the EPA's CDX (http://cdx.epa.gov). FPLE Wyman shall use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. [40 C.F.R. § 63.10031(f)(4)]

2. Recordkeeping Requirements

FPLE Wyman shall maintain the following records in a form suitable and readily available for expeditious review, according to 40 C.F.R. § 63.10(b)(1):
[40 C.F.R. §§ 63.10032(a), (c), and (g) through (j) and 63.10033(a)]

a. A copy of each notification and report that is submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that was submitted, according to the requirements in 40 C.F.R. § 63.10(b)(2)(xiv);

b. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in 40 C.F.R. § 63.10(b)(2)(viii);

c. All records required by Table 7 of this subpart, including the results of each period performance tune-ups;

d. Records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment;

e. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to it normal or usual manner of operation;

f. Records of the types and amounts of fuel used during each startup and shutdown; and

g. Records of the types and amounts of fuel use in each calendar quarter for each unit to document that the capacity factor limitation for the limited-use liquid oil-fired EGU subcategory is met.

(15) **Units #1 and #2 – 630 MMBtu/hr each**

A. Heat Input and Allowable Fuels

1. Units #1 and #2 are licensed to fire #6 fuel oil and specification waste oil (as defined by 06-096 C.M.R. ch. 860, *Waste Oil Management Rules*). [A-388-70-E-R (4/26/2012), BPT]

2. FPLE Wyman shall maintain records of quantities of fuel combusted in Units #1 and #2 on a monthly and 12-month rolling total basis. [A-388-70-E-R (4/26/2012), BPT]

3. Units #1 and #2 shall each be limited to a maximum heat input of 630 MMBtu/hr, on a three-hour block average basis, firing #6 fuel oil. Records shall be maintained showing compliance with this limit, including records of fuel flow into each unit and the heat content of the fuel. [A-388-70-E-R (4/26/2012), BPT] **Enforceable by State-only**

B. Fuel Sulfur Content

1. #6 Fuel Oil

The #6 fuel oil fired in Units #1 and #2 shall have a maximum sulfur content of 0.5% by weight. [38 M.R.S. §§ 603-A(2)(A)(1) and (2)]

The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by Maine statute for all fuel received as of July 1, 2018. [06-096 C.M.R. ch. 140, BPT]

2. Sulfur Content Compliance

Fuel sulfur content compliance shall be demonstrated by fuel oil analysis of fuel in the bulk fuel oil storage tanks if the fuel is blended on-site, or by fuel delivery receipts if the maximum sulfur content delivered is at or below the sulfur content limits listed above. [A-388-70-E-R (4/26/2012), BPT]

C. Control Equipment

1. Particulate Matter

a. FPLE Wyman shall control particulate matter emissions from Units #1 and #2 by use of multi-clones. [A-388-71-A-R (12/27/1995), BPT]

b. FPLE Wyman shall maintain a log of all maintenance performed on each multi-clone, as well as a log documenting the nature of all particulate control failures and the corrective actions taken. [A-388-70-A-I (10/2/2002), BPT

2. Nitrogen Oxides

FPLE Wyman shall operate low-NO_x burners on Units #1 and #2 for control of NO_x emissions. [A-388-71-A-R (12/27/1995), BPT]

D. Emission Limits

1. Emissions from Units #1 and #2 shall not exceed the following limits:
Note: Emission limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	06-096 C.M.R. ch. 103, § 2.A.(1)	-
NO_X	0.45 (24-hr block avg)	A-388-71-C-A (5/18/1995), NO_x RACT	-
	0.22 (90-day rolling avg)[1]	06-096 C.M.R. ch. 145, § 3.B.(2)(a)	**Enforceable by State-only**

[1] Emissions averaging between Units #1 and #2 is allowed per Ch. 145 to demonstrate compliance with this limit. [06-096 C.M.R. ch. 145, § 3.C]

2. Emissions from Units #1 and #2 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	126.0	A-388-71-A-R (12/27/1995), BPT	Enforceable by State-only
PM_{10}	126.0		
SO_2	331.0 (3-hr block avg)	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
NO_X	283.5 (24-hr block avg)	A-388-71-C-A (5/18/1995), NO_x RACT	-
CO	315.0	A-388-71-A-R (12/27/1995), BPT	Enforceable by State-only
VOC	63.0		

E. FPLE Wyman shall install, operate, and maintain the proposed NO_x control technology (optimization/combustion controls) which meet the requirements of 06-096 C.M.R. ch. 145 on Units #1 and #2.
[06-096 C.M.R. ch. 145 and A-388-71-G-M (6/6/2002), BPT]:

F. Visible Emissions

Visible emissions from Units #1 and #2 shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The remaining five percent of all six-minute block averages on a quarterly basis shall be no greater than 45% opacity. Periods of start-up, shutdown, and malfunctions are included for the purpose of calculating block averages. Periods when the unit is not operating are not included for the purpose of calculating block averages. Quarterly basis is the period of time from January 1 to March 31, April 1 to June 30, etc. To demonstrate compliance with the limits above, FPLE Wyman shall operate and maintain a COMS on Units #1 and #2. [06-096 C.M.R. ch. 101, § 3.A.(1)(c)]

G. Compliance Methods

1. Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 C.M.R. ch. 140, BPT]:

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five years from the date of the most recent previous stack test (1/26/2017 for Unit #1 and 1/31/2017 for Unit #2)[1]
	lb/hr		
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/hr	Fuel flow meter and fuel analysis	Continuous (in accordance with 40 C.F.R. Part 75, App. A, B, D, and F)
NO_X	lb/MMBtu	NO_x CEMS	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A & B)
	lb/hr		
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	COMS	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A & B)

[1] [38 M.R.S. § 589(2)]

2. FPLE Wyman shall operate a fuel flow monitoring system on each unit which continuously monitors and records the rate of fuel oil delivered to and combusted within each unit. This system shall be maintained and operated in accordance with 40 C.F.R. Part 75, App. A and B. [A-388-70-A-I (10/2/2002), BPT and 40 C.F.R. Part 75]

3. During periods of time when Units #1 and #2 are below 120 MMBtu/hr heat input, the NO_x lb/MMBtu value that is monitored shall not be included in determining the 24-hour block average basis NO_x emission rate (lb/MMBtu only). [A-388-71-C-A (5/18/1995), NO_x RACT]

H. Periodic Monitoring

FPLE Wyman shall operate, record data, and maintain records for Units #1 and #2 and their associated air pollution control equipment as indicated in the following tables whenever the equipment is operating. [06-096 C.M.R. ch. 140, BPT]

Units #1 and #2				
Value	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**	
			Monitor	**Record**
#6 fuel oil use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
#6 fuel oil sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As Delivered/ As analyzed	As Delivered/ As analyzed
Waste oil use	Gallons	Estimation of amount collected and burned	As Collected	Monthly and 12-month rolling total
Heat input	MMBtu/hr	Fuel flow meter & fuel heating value	Continuously	Hourly (one-hour block averages)
Operating time	Hours	Boiler control system (DCS)	Continuously	Monthly

Multi-clones on Units #1 and #2		
Records Maintained	**Monitoring Tool/Method**	**Frequency**
Documentation of maintenance, malfunction, and downtime of the multi-clones	Logbook or electronic log	As each situation occurs

I. CEMS and COMS

1. FPLE Wyman shall operate and maintain the following CEMS and COMS for Units #1 and #2 whenever each unit is operating:

Pollutant and Continuous Monitors	**Units**	**Averaging Period**	**Origin and Authority**
NO_x CEMS	lb/MMBtu	24-hour block average	A-388-71-C-A (5/18/1995), NO_x RACT, 06-096 C.M.R. ch. 117, § 1.B.(2), and 40 C.F.R. § 75.10(a)(2) and (a)(3)
		90-day rolling average	
	lb/hr	24-hour block average	
CO_2 CEMS	%	One-hour block average	06-096 C.M.R. ch. 117, § 1.B.(9) and 40 C.F.R. § 75.10(a)(3)(i)
Opacity COMS	%	Six-minute block average	40 C.F.R. § 75.10(a)(4) and 06-096 C.M.R. ch. 117, § 1.B.(1)

2. In addition to the NO_x CEMS, FPLE Wyman shall also operate a diluent gas monitor. Both the NO_x CEMS and diluent gas monitor shall be operated on each stack breaching.

3. During periods of time when Units #1 and #2 are operating below 120 MMBtu/hr heat input, the lb/MMBtu value that is monitored shall not be included in determining the 24-hour block arithmetic average NO_x emission rate. [A-388-71-C-A (5/18/1995), NO_x RACT]

4. Compliance with the 90-day rolling average basis NOx lb/MMBtu limit is only required for an individual unit when the total tons per year of NOx from the unit is equal to or greater than the major source threshold of 100 tons per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 145, § 3.E.]

(16) **Unit #3 – 1,190 MMBtu/hr**

A. Heat Input and Allowable Fuels

1. Unit #3 is licensed to fire #6 fuel oil, distillate fuel, and specification waste oil (as defined by 06-096 C.M.R. ch. 860, *Waste Oil Management Rules*). [A-388-70-E-R (4/26/2012), BPT]

2. FPLE Wyman shall maintain records of the quantity of each fuel combusted in Unit #3 on a monthly and 12-month rolling total basis. [A-388-70-E-R (4/26/2012), BPT]

3. Unit #3 shall be limited to a maximum heat input of 1,190 MMBtu/hr (based on a three-hour block average). FPLE Wyman shall maintain records showing compliance with this limit, including records of fuel flow into the unit and the heat content of the fuel. [A-388-70-E-R (4/26/2012), BPT] **Enforceable by State-only**

B. Fuel Sulfur Content

1. #6 Fuel Oil

The #6 fuel oil fired in Unit #3 shall have a maximum sulfur content of 0.5% by weight. [38 M.R.S. §§ 603-A(2)(A)(1) and (2)]

The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by Maine statute for all fuel received as of July 1, 2018. [06-096 C.M.R. ch. 140, BPT]

2. Distillate Fuel

FPLE Wyman shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Unit #3. [38 M.R.S. § 603-A(2)(A)(3)(a)]

3. Sulfur Content Compliance

Fuel sulfur content compliance shall be demonstrated by fuel oil analysis of the bulk fuel oil storage tanks if the fuel is blended on-site or by fuel delivery receipts if the maximum sulfur content delivered is at or below the sulfur content limits listed above. [A-388-70-E-R (4/26/2012), BPT]

C. Control Equipment

1. Particulate Matter

a. FPLE Wyman shall control particulate matter emissions from Unit #3 by use of multi-clones. [A-388-71-A-R (12/27/1995), BPT]

b. FPLE Wyman shall maintain a log of all maintenance performed on each cyclone, as well as a log documenting the nature of all failures and corrective actions taken. [A-388-70-A-I (10/2/2002), BPT]

2. Nitrogen Oxides

   FPLE Wyman shall operate a staged combustion air system on Unit #3 to meet the NO_x emission limits for this unit. [A-388-71-C-A (5/18/1995), NO_x RACT and 06-096 C.M.R. ch. 145]

D. Emission Limits

1. Emissions from Unit #3 shall not exceed the following limits:
   Note: Emission limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	lb/MMBtu	Origin and Authority
PM	0.18	A-388-77-2-M (11/2/2010), BART
NO_x	0.30 (24-hr block avg)	06-096 C.M.R. ch. 138, § 3.B.(1) & (8)
	0.175 (rolling 90-operating-day avg from Unit #3 alone)	A-388-77-2-M (11/2/2010), BART
	0.165 (rolling 90-operating-day avg if the facility chooses to average emissions from Units #3 and #4)	

2. Emissions from Unit #3 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	238.0	A-388-71-A-R (12/27/1995), BPT	**Enforceable by State-only**
PM_{10}	238.0		
SO_2	625.2 (3-hr block avg)	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
NO_x	357.0 (24-hr block avg)	A-388-71-C-A (5/18/1995), NO_x RACT	-
CO	595.0	A-388-71-A-R (12/27/1995), BPT	**Enforceable by State-only**
VOC	119.0		

E. Visible Emissions

Visible emissions from Unit #3 shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The remaining five percent of all six-minute block averages on a quarterly basis shall be no greater than 45% opacity. Periods of start-up, shutdown, and malfunctions are included for the purpose of calculating block averages. Periods when the unit is not operating are not included for the purpose of calculating block averages. Quarterly basis is the period of time from January 1 to March 31, April 1 to June 30, etc. To demonstrate

compliance with the limits above, FPLE Wyman shall be required to operate and maintain a COMS on Unit #3. [06-096 C.M.R. ch. 101, § 3.A.(1)(c)]

FPLE Wyman shall operate a COMS on each breaching of Unit #3 to demonstrate compliance with the opacity limit. [A-388-71-A-R (12/27/1995), BPT]

FPLE Wyman shall demonstrate compliance with the opacity limit using COMS data and a straight numerical average between breachings #3A and #3B. [A-388-70-A-I (10/2/2002), BPT]

F. Compliance Methods

1. Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 C.M.R. ch. 140, BPT]:

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five years from the date of the most recent previous stack test (1/30/2017)[1]
	lb/hr		
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/MMBtu	Fuel flow meter and fuel analysis	Continuous (in accordance with 40 C.F.R. Part 75, App. D and F)
	lb/hr		
NO_X	lb/MMBtu	NO_x CEMS on a 24-hour block average basis and rolling 90 operating-day average basis	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A & B)
	lb/hr	NO_x CEMS on a 24-hour block average basis	
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	COMS on a 6-minute block average basis	Continuous (in accordance with 40 C.F.R. Part 60, App. B and 40 C.F.R. Part 75, App. A & B)

[1] [38 M.R.S. § 589(2)]

2. FPLE Wyman shall operate a fuel flow monitoring system on Unit #3 which continuously monitors and records the rate of fuel oil delivered to and combusted within the unit. This system shall be maintained and operated in accordance with 40 C.F.R. Part 75, App. A & B. [A-388-70-A-I (10/2/2002), BPT and 40 C.F.R. Part 75]

3. Periods of time when the unit is firing at or below a heat input capacity of 226 MMBtu/hr shall not be included in determining the 24-hour block arithmetic average NO_x emission rate (lb/MMBtu only). [A-388-71-C-A (5/18/1995), NO_x RACT]

G. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following periodic monitoring values for Unit #3 and its associated air pollution control equipment whenever the equipment is operating. [06-096 C.M.R. ch. 140, BPT]

Unit #3				
Value	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**	
			Monitor	**Record**
#6 fuel oil use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
#6 fuel oil sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As delivered/ As analyzed	As Delivered/ As Analyzed
Distillate fuel use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As Delivered/ As Analyzed	As Delivered/ As Analyzed
Waste oil use	Gallons	Estimation of amount collected and burned	As Collected	Monthly and 12-month rolling total
Heat input	MMBtu/hr	Fuel flow meter & fuel heating value	Continuously	Hourly (one-hour block averages)
Operating time	Hours	Boiler control system (DCS)	Continuously	Monthly

Multi-clone on Unit #3		
Records Maintained	**Monitoring Tool/Method**	**Frequency**
Documentation of maintenance, malfunctions, and downtime of the multi-clone	Logbook or electronic log	As each situation occurs

H. Parameter Monitors [40 C.F.R. Part 64]

During all operating times, FPLE Wyman shall operate, record data, and maintain records from the following parameter monitors for Unit #3 in accordance with FPLE Wyman's approved CAM plan:

Parameter	Frequency
Multi-clone differential pressure	Monitor: Continuously Record: One-hour block average

I. CEMS and COMS

1. FPLE Wyman shall operate and maintain the following CEMS and COMS for Unit #3 whenever the unit is operating:

Pollutant and Continuous Monitors	Units	Averaging Period	Origin and Authority
NO_x CEMS	lb/MMBtu	24-hour block average, rolling 90 operating-day average	A-388-71-C-A (5/18/1995), NO_x RACT, 06-096 C.M.R. ch. 117, § 1. and
	lb/hr	24-hour block average	40 C.F.R. § 75.10(a)(2) and (a)(3)
CO_2 CEMS	%	One-hour block average	40 C.F.R. § 75.10(a)(3)(i) and 06-096 C.M.R. ch. 117, § 1.B.(9)
Opacity COMS	%	Six-minute block average	40 C.F.R. § 75.10(a)(4) and 06-096 C.M.R. ch. 117, § 1.B.(1)

2. In addition to the NO_x CEMS, FPLE Wyman shall also operate a diluent gas monitor. Both the NO_x CEMS and diluent gas monitor shall be operated on each stack breaching. [40 C.F.R. § 75.10(a)(2) and A-388-70-A-I (10/2/2002), BPT]

3. During periods of time when Unit #3 is operating below 226 MMBtu/hr heat input, the lb/MMBtu NO_x value that is monitored shall not be included in determining the 24-hour block arithmetic average NO_x emission rate. [A-388-71-C-A (5/18/1995), NO_x RACT]

4. FPLE Wyman shall operate and maintain a COMS on both breachings of Unit #3 [A-388-71-A-R (12/27/1995), BPT]

J. Compliance Assurance Monitoring

FPLE Wyman shall meet the following CAM requirements for Unit #3:

Indicator	Pressure differential across multi-clones
Measurement Method	FPLE Wyman shall monitor pressure differential on the multi-clones with differential pressure transducers
Indicator Range	The target pressure differential across the multi-clones shall be less than six inches of water on a one-hour block average basis. During the PM stack testing required by the Part 70 renewal, the pressure differential shall be recorded. FPLE Wyman may reestablish the target level based on data obtained during stack tests. Any change of the target level shall be submitted in a letter to the Department for written approval. The current target level shall remain in effect until the Department's written approval is received. If the pressure differential exceeds the target level, it is considered an excursion and the problem must be identified and repairs completed as necessary. The excursion will be reported to the Department in FPLE Wyman's semiannual reports.
Data Representativeness	The differential pressure transducers shall remain installed at the gas inlet and outlet ducts per manufacturer's design.
QA/QC	FPLE Wyman shall calibrate, maintain, and operate the instrumentation using procedures that take into account the manufacturer's specifications. The QA/QC procedures shall be submitted to the Department.
Monitoring Frequency	FPLE Wyman shall measure the multi-clones pressure differential continuously.
Data Collection Procedure	FPLE Wyman's electronic data system shall calculate and records one-hour block average pressure differentials. The system shall alarm when a one-hour block average pressure differential exceeds the established target level. When an alarm goes off, the operators shall manually record the time, the problem diagnosis, and the corrective action taken (including the time the corrective action was completed).
Averaging Period	One-hour block averages.

(17) **Unit #4 – 6,290 MMBtu/hr**

A. Heat Input and Allowable Fuels

1. Unit #4 is licensed to fire #6 fuel oil, distillate fuel, and specification waste oil (as defined by 06-096 C.M.R. ch. 860, *Waste Oil Management Rules*). [A-388-70-E-R (4/26/2012), BPT]

2. FPLE Wyman shall maintain records of the quantity of each fuel consumed on a monthly and 12-month rolling total basis. [A-388-70-E-R (4/26/2012), BPT]

3. Unit #4 shall be limited to a maximum heat input of 6,290 MMBtu/hr (based on a three-hour block average). FPLE Wyman shall maintain records showing compliance with this limit, including records of fuel flow into the unit and the heat content of the fuel. [A-388-70-E-R (4/26/2012), BPT] **Enforceable by State-only**

B. Fuel Sulfur Content

1. #6 Fuel Oil

The #6 fuel oil fired in Unit #4 shall have a maximum sulfur content of 0.5% by weight. [38 M.R.S. §§ 603-A(2)(A)(1) and (2)]

The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by Maine statute for all fuel received as of July 1, 2018. [06-096 C.M.R. ch. 140, BPT]

2. Distillate Fuel

FPLE Wyman shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Unit #4. [38 M.R.S. § 603-A(2)(A)(3)(a)]

3. Sulfur Content Compliance

Sulfur content compliance shall be demonstrated by fuel records showing the type and the percent sulfur of either the fuel delivered, or fuel used. Fuel sulfur content compliance shall be demonstrated by fuel oil analysis of the bulk fuel oil storage tanks if the fuel is blended on-site or by fuel delivery receipts if the maximum sulfur content delivered is at or below the sulfur content limits listed above. [A-388-70-E-R (4/26/2012), BPT]

C. Control Equipment

1. Particulate Matter

a. FPLE Wyman shall control PM emissions from Unit #4 by use of an ESP. FPLE Wyman shall maintain the following records relating to the ESP: [A-388-71-A-R (12/27/1995), BPT and A-388-70-A-I (10/2/2002), BPT]

(1) A log of all maintenance performed on the ESP, as well as logging the nature of all failures and corrective action taken; and

(2) A log of the voltage and current meter readings as recorded at least once per 24-hour operating period.

b. FPLE Wyman shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent demonstration of compliance with the licensed PM limits.
[A-388-70-A-I (10/2/2002), BPT]

2. Nitrogen Oxides

FPLE Wyman shall operate a staged combustion system with flue gas recirculation to meet the NO_x emission limits for this unit. [A-388-71-A-R (12/27/1995), BPT, A-388-71-C-A (5/18/1995), NO_x RACT, and 06-096 C.M.R. ch. 145]

D. Emission Limits

1. Emission limits are on a 1-hour block average basis unless otherwise stated. Emissions from Unit #4 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.10	40 C.F.R. § 60.42(a)(1) & A-388-77-2-M (11/2/2010), BART
SO_2	0.80 (3-hr rolling total)	40 C.F.R. § 60.43(a)(1) & A-388-77-2-M (11/2/2010), BART
NO_x	0.30 (3-hr rolling avg)	40 C.F.R. § 60.44(a)(2)
	0.170 (rolling 90-operating-day avg from Unit #4 alone)	A-388-77-2-M (11/2/2010), BART
	0.165 (rolling 90-operating-day avg if the facility chooses to average emissions from Units #3 and #4)	

2. Emissions from Unit #4 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	629.0	A-388-71-A-R (12/27/1995), BPT	Enforceable by State-only
PM_{10}	629.0	A-388-71-A-R (12/27/1995), BPT	
SO_2	3,304.4 (3-hr block avg)	06-096 C.M.R. ch. 140, BPT	
NO_x	1,887 (24-hr block avg)	A-388-71-C-A (5/18/1995), NO_x RACT	-
CO	31,450.0	A-388-71-A-R (12/27/1995), BPT	Enforceable by State-only
VOC	629.0	A-388-71-A-R (12/27/1995), BPT	

E. Visible Emissions

Visible emissions from Unit #4 shall not exceed 20% opacity on a six-minute block average basis except for one six-minute period per hour of not more than 27% opacity. [40 C.F.R. § 60.42(a)(2)]

F. Startup/Shutdown Provisions

In order to demonstrate compliance with visible emission limits for Boiler #4 during periods of startup and shutdown (as defined in this license), FPLE Wyman may elect to comply with the following site-specific work practice standards in lieu of the numerical opacity standard:

1. Adherence to the manufacturer's suggested standard operating procedures for startup and shutdown;

2. Before startup, inspection of the ESP and ESP dust collection system equipment to ensure that the equipment is free of foreign matter and to ensure their proper function;

3. During startup, engagement of the ESP as soon as it is deemed safe to do so in accordance with manufacturer's recommendations;

4. During shutdown, operation of the ESP for as long as it is deemed safe to do so in accordance with manufacturer's recommendations; and

5. During startup and shutdown, soot blowing as soon as it deemed safe to do so in accordance with manufacturer's recommendations and not to commence while the ESP is not operational.

[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

G. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 C.M.R. ch. 140, BPT]:

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five years from the date of the most recent previous stack test (1/24/2017)[1]
	lb/hr		
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/MMBtu	Fuel flow meter and fuel analysis[2]	Continuous (in accordance with 40 C.F.R. Part 75, App. D and F)
	lb/hr		
NO_X	lb/MMBtu	NO_x CEMS on a 3-hour rolling average basis and rolling 90 operating-day average basis	Continuous (in accordance with 40 C.F.R. Part 60, App. B)
	lb/hr	NO_x CEMS on a 24-hour block average basis	
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	COMS on a 6-minute block average basis	Continuous (in accordance with 40 C.F.R. Part 60, App. B)

1. [38 M.R.S. § 589(2)]
2. [40 C.F.R. §§ 60.45(a) and (b)(2)]

H. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following periodic monitoring values for Unit #4 and its associated air pollution control equipment whenever the equipment is operating. [06-096 C.M.R. ch. 140, BPT]

Unit #4				
			Frequency	
Value	Units of Measure	Monitoring Tool/Method	Monitor	Record
#6 fuel oil use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
#6 fuel oil sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As delivered/ As analyzed	As delivered/ As analyzed
Distillate fuel use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As delivered/ As analyzed	As delivered/ As analyzed
Waste oil use	Gallons	Estimation of amount collected and burned	As Collected	Monthly and 12-month rolling total
Operating time	Hours	Boiler control system (DCS)	Continuously	Monthly and annually

ESP on Unit #4		
Records Maintained	Monitoring Tool/Method	Frequency
Documentation of maintenance, malfunctions, and downtime of the ESP	Logbook or electronic log	As each situation occurs

During periods of startup and shutdown, FPLE Wyman shall maintain records of startups and shutdowns that shall include dates, times, and duration, records of the pre-startup inspections of the ESP and ESP dust collection system, and time the ESP was engaged (during startup) or disengaged (shutdown).

During all startups/shutdowns, FPLE Wyman shall continuously monitor the following items. FPLE Wyman shall record the monitored value at least once per hour. The records of hourly readings shall be included in the startup/shutdown record.

1. Thermal oil temperature;

2. ESP exit gas oxygen content; and

3. Secondary voltage on each field of the ESP.

I. Parameter Monitors [40 C.F.R. Part 64]

During all operating times, FPLE Wyman shall operate, record data, and maintain records from the following parameter monitors for Unit #4 in accordance with FPLE Wyman's approved CAM plan:

Parameter	Frequency
ESP Secondary Voltage	Monitor: Continuously Record: Three-hour block average
ESP Secondary Current	Monitor: Continuously Record: Three-hour block average

J. CEMS and COMS

1. FPLE Wyman shall operate and maintain the following CEMS and COMS for Unit #4 whenever the unit is operating:

Pollutant and Continuous Monitor	Unit of Measurement	Averaging Period	Origin and Authority
NO_x CEMS	lb/MMBtu	3-hour rolling average, Rolling 90 operating-day average	A-388-71-C-A (5/18/1995), NO_x RACT, 40 C.F.R. § 60.45(a), 40 C.F.R. § 75.10(a)(2) and (a)(3), and 06-096 C.M.R. ch. 117, § 1.B.(2)
	lb/hr	24-hour block average	
CO_2 CEMS	%	One-hour block average	40 C.F.R. § 60.45(b)(4), 40 C.F.R. § 75.10(a)(3)(i) and 06-096 C.M.R. ch. 117, § 1.B.(9)
Opacity COMS[1]	%	Six-minute block average	40 C.F.R. § 60.45(a), 40 C.F.R. § 75.10(a)(4) and 06-096 C.M.R. ch. 117, § 1.B.(1)

[2] Unit #4 has a single COMS in the stack, not one in each breaching like Unit #3.

2. In addition to the NO_x CEMS, FPLE Wyman shall also operate a diluent gas monitor. [40 C.F.R. § 75.10(a)(2) and A-388-70-A-I (10/2/2002), BPT]

K. Compliance Assurance Monitoring

FPLE shall meet the following CAM requirements for Unit #4:

Condition	ESP Total Secondary Power
Indicator	ESP secondary voltage and secondary current are measured for each field to determine the power to the ESP.
Measurement Method	FPLE Wyman shall monitor the ESP secondary voltage using a voltmeter and the ESP secondary current using an ammeter. The total power is calculated in the Precipitator Optimization System (POS).
Indicator Range	An excursion shall be defined as an ESP power input less than 700 kW. Excursions trigger an alarm (by the POS), an inspection, a corrective action, and a reporting requirement.
Date Representativeness	The voltage and current are measured using the instrumentation the manufacturer provided with the ESP. The POS collects and records the data and is used to generate reports.
QA/QC	FPLE Wyman shall confirm the meters read zero when Unit #4 is not operating.
Monitoring Frequency	FPLE Wyman shall measure the voltage and current continuously and shall use the data to calculate the power input every three hours.
Date Collection Procedure	FPLE Wyman's POS shall calculate and record the average power input.
Averaging Period	Three-hour block average.

L. 40 C.F.R. Part 60, Subpart D

FPLE Wyman shall comply with all requirements of 40 C.F.R. Part 60, Subpart D applicable to Unit #4 including, but not limited to, the following:

1. Monitoring Requirements

a. Particulate Matter (PM)

The span value of the COMS shall be set at 80, 90, or 100 percent. [40 C.F.R. § 60.45(c)(3)]

b. Nitrogen Oxides (NO_x)

(1) For performance evaluations under 40 C.F.R. § 60.13(c) and calibrate checks under 40 C.F.R. § 60.13(d), FPLE Wyman shall use the following procedures [40 C.F.R. § 60.45(c)(1) and (2)]:

(i) FPLE Wyman shall use Methods 7 and 3B of 40 C.F.R. Part 60, Appendix A for the NO_x CEMS performance evaluations except as provided in 40 C.F.R. § 60.46(d); and

(ii) FPLE Wyman shall use nitric oxide for preparing calibration gas mixtures under Performance Specification 2 (PS-2) of 40 C.F.R. Part 60, Appendix B.

(2) The span value of the NO_x CEMS shall be set at 500 ppm. [40 C.F.R. § 60.45(c)(3)(i)]

(3) For the NO_x CEMS, the conversion procedures included in 40 C.F.R. §§ 60.45(e) and (f) shall be used to convert the continuous monitoring data into lb/MMBtu. [40 C.F.R. §§ 60.45(e) and (f)]

2. Testing Requirements

If requested to conduct a subsequent performance test by EPA and/or the Department, FPLE Wyman shall use the test methods and procedures in 40 C.F.R. § 60.46. [40 C.F.R. §§ 60.46(a), (b), and (d)]

3. Reporting Requirements

FPLE Wyman shall submit excess emission and monitoring system performance (MSP) reports to EPA and the Department semiannually for each six-month period in the calendar year. These reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in 40 C.F.R. § 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows [40 C.F.R. § 60.45(g)]:

a. For opacity, excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20% opacity, except that one six-minute block average per hour of up to 27% opacity need not be reported.

b. For NO_x, excess emissions are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standard in 40 C.F.R. § 60.44(a)(2).

(18) **Unit #5 – 72 MMBtu/hr**

A. Heat Input and Allowable Fuels

1. Unit #5 is licensed to fire #6 fuel oil, distillate fuel, and/or specification waste oil (as defined by 06-096 C.M.R. ch. 860, *Waste Oil Management Rules*). [A-388-70-E-R (4/26/2012), BPT]

2. FPLE Wyman shall maintain records of the quantity of each fuel consumed on a monthly and 12-month rolling total basis. [A-388-70-E-R (4/26/2012), BPT] **Enforceable by State-only**

3. Unit #5 shall be limited to a maximum heat input of 72 MMBtu/hr (based on a three-hour block average). FPLE Wyman shall maintain records demonstrating compliance with this limit, including records of fuel flow into the unit and the heat content of the fuel. [A-388-70-E-R (4/26/2012), BPT] **Enforceable by State-only**

B. Fuel Sulfur Content

1. #6 Fuel Oil

The #6 fuel oil fired at the facility shall have a maximum sulfur content of 0.5% by weight. [38 M.R.S. §§ 603-A(2)(A)(1) and (2)]

The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by Maine statute for all fuel received as of July 1, 2018. [06-096 C.M.R. ch. 140, BPT]

2. Distillate Fuel

The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Unit #5. [38 M.R.S. § 603-A(2)(A)(3)(a)]

3. Sulfur Content Compliance

Sulfur content compliance shall be demonstrated by fuel records showing the type and the percent sulfur of either the fuel delivered, or fuel used. Fuel sulfur content compliance shall be demonstrated by fuel oil analysis of the bulk fuel oil storage tanks if the fuel is blended on-site or by fuel delivery receipts if the maximum sulfur content delivered is at or below the sulfur content limits listed above. [A-388-70-E-R (4/26/2012), BPT]

C. FPLE Wyman shall operate low-NO_x burners on Unit #5. [A-388-71-C-A (5/18/1995), NO_x RACT]

D. Emission Limits

The following emission limits are on a one-hour block average basis unless otherwise stated.

1. Emissions from Unit #5 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.062	40 C.F.R. Part 63, Subpart DDDDD, Table 2, § 15.
NO_x	0.35	A-388-71-C-A (5/18/1995), NO_x RACT
HCl	0.0011	40 C.F.R. Part 63, Subpart DDDDD, Table 2, § 14.
Hg	2.0×10^{-6}	

2. Emissions from Unit #5 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	14.4	A-388-71-A-R (12/27/1995), BPT	Enforceable by State-only
PM_{10}	14.4	A-388-71-A-R (12/27/1995), BPT	Enforceable by State-only
SO_2	37.8	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
NO_x	25.2	A-388-71-C-A (5/18/1995), NO_x RACT	-
CO	36.0	A-388-71-A-R (12/27/1995), BPT	Enforceable by State-only
	130 ppmdv @ 3% O_2	40 C.F.R. Part 63, Subpart DDDDD, Table 2, § 15.	-
VOC	7.2	A-388-71-A-R (12/27/1995), BPT	Enforceable by State-only

E. Visible Emissions

Visible emissions from Unit #5 shall not exceed 30% opacity on a six-minute block average basis except for periods of startup, shutdown, and malfunction, during which time FPLE Wyman may elect to comply with the following work practice standards in lieu of this numerical visible emission limit [06-096 C.M.R. ch. 101, § 3.A.(1)(a)]:

1. Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for the unit;

2. Develop and implement a written startup and shutdown plan for the unit;

3. The duration of unit startups, shutdowns, or malfunctions shall each not exceed one hour per occurrence; and

4. Operate the unit 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. Compliance Methods

1. Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 C.M.R. ch. 140, BPT]:

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every other year, but no more than 13 months from the previous test unless performance tests for two consecutive years show emissions at or below 75% of the limit in 40 C.F.R. Part 63, Subpart DDDDD, at which point the facility may elect to test every other year unless there are changes in operation of the boiler that could increase emissions or the facility tests above 75% of the limit, at which point the facility must begin testing every year again until there are two consecutive tests below 75% of the limit
	lb/hr		

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/hr	Fuel flow meter[1] and 40 C.F.R. Part 75, App. D data obtained from Unit #1 or Unit #2	Continuous (in accordance with 40 C.F.R. Part 75, App. D and F)
NO_X	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 7	Once every two years by May 31st of the second year
	lb/hr		
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
	ppmdv		Once every year, but no more than 13 months from the previous test, or otherwise in accordance with 40 C.F.R. Part 63, Subpart DDDDD
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
HCl	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 26 or 26A	Once every year, but no more than 13 months from the previous test, or otherwise in accordance with 40 C.F.R. Part 63, Subpart DDDDD
Hg	lb/MMBtu	40 C.F.R. Part 60, App. A, Methods 29, 30A, or 30 B, 40 C.F.R. Part 61, App. B, Method 101A, or ASTM Method D6784	Once every year, but no more than 13 months from the previous test, or otherwise in accordance with 40 C.F.R. Part 63, Subpart DDDDD
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

2. The fuel flow monitor shall continuously monitor and record the rate of fuel oil fired into and combusted within the unit. The fuel flow monitor system shall be maintained and operated in accordance with the manufacturer's specifications. [A-388-70-A-I (10/2/2002), BPT]

3. In accordance with 40 C.F.R. § 63.7515, if performance tests for a given pollutant for at least two consecutive years show emissions at or below 75% of the 40 C.F.R. Part 63, Subpart DDDDD emission limit for that pollutant, and if there are no changes in the operation of the boiler or air pollution control equipment that could increase emissions, FPLE Wyman may opt to conduct performance testing every third year on this unit. If Such option and conditions shall be in accordance with the requirements and specifications of 40 C.F.R. § 63.7515.

G. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following periodic monitoring values for Unit #5 and its associated air pollution control equipment whenever the equipment is operating. [06-096 C.M.R. ch. 140, BPT]

Unit #5				
			Frequency	
Value	Units of Measure	Monitoring Tool/Method	Monitor	Record
#6 fuel oil use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
#6 fuel oil sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As Delivered/ As Analyzed	As Delivered/ As Analyzed
Distillate fuel use	Gallons	Fuel flow meter	Continuously	Monthly and 12-month rolling total
Distillate fuel sulfur content	Percent, by weight	Fuel receipts from supplier or fuel analysis	As Delivered/ As Analyzed	As Delivered/ As Analyzed
Waste oil use	Gallons	Estimation of amount collected and burned	As Collected	Monthly and 12-month rolling total
Operating time	Hours	Boiler control system (DCS)	Continuously	Monthly and annually

H. Parameter Monitors

During all operating times, FPLE Wyman shall operate, record data, and maintain records from the following CPMS for Unit #5:

Parameter	Frequency
Boiler operating load	Monitor: Continuously Record: 30-day rolling average

[40 C.F.R. § 63.7525(d) and 40 C.F.R. Part 63, Subpart DDDDD, Table 4, Row 7]

I. 40 C.F.R. Part 63, Subpart DDDDD

FPLE Wyman shall comply with all requirements of 40 C.F.R. Part 63, Subpart DDDDD applicable to Unit #5 including, but not limited to, the following:

1. Notification and Reporting Requirements

a. Notification of Intent to Conduct a Performance Test

FPLE Wyman shall submit a Notification of Intent to conduce a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. §§ 63.7495(d) and 63.7545(a) and (d)]

b. Performance Test Reports

FPLE Wyman shall report the results of all performance tests and associated fuel analyses required under this subpart within 60 days after completion of a performance test. This report shall also verify that the operating limits for the unit have not changed or provide documentation of revised operating limits established according to 40 C.F.R. § 63.7530 and Table 7 to this subpart, as applicable. The reports for all performance tests shall include all applicable information required in 40 C.F.R. § 63.7550 and shall be submitted to CEDRI according to the procedures in 40 C.F.R. § 63.7550(h). [40 C.F.R. §§ 63.7515(f) and 63.7550(h)]

c. Semiannual Reports

FPLE Wyman shall submit semiannual reports to EPA and the Department. These reports shall be submitted according to the dates established for semiannual reporting in this air emission license. These reports shall include the following information and shall be submitted in the following form [40 C.F.R. §§ 63.7550(a) through (e), 63.7550(h), 63.7540(b), & 40 C.F.R. Part 63, Subpart DDDDD, Table 9]:

(1) Required Information

Each semiannual compliance report shall contain the information required by 40 C.F.R. §§ 63.7540(b), 63.7550(c) through (e), and 40 C.F.R. Part 63, Subpart DDDDD, Table 9.

(2) Submittal of Reports

FPLE Wyman shall submit the semi-annual compliance reports required by this subpart electronically to EPA and the Department via CEDRI according to the procedures listed in 40 C.F.R. § 63.7550(h).

2. Work Practice Standards

FPLE Wyman shall meet each work practice standard listed below for Unit #5. FPLE Wyman may petition EPA for use of alternative work practice standard(s). FPLE Wyman shall meet these work practice standards whenever Unit #5 is operating, except during periods of startup and shutdown, during which time FPLE Wyman shall comply only with the startup and shutdown work practice standards. [40 C.F.R. §§ 63.7500(a)(1), (b), and (f), 63.7505(a), and 63.7530(h)]

a. Emission Minimization Requirement

At all time, FPLE Wyman shall operate and maintain Unit #5, including associated air pollution control and monitoring equipment, 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 administrator 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 source. [40 C.F.R. §§ 63.7500(a)(3) and 63.7505(a)]

b. Startup and Shutdown

(1) During startup of Unit #5, FPLE Wyman shall comply with the work practice standards listed in item 5. of 40 C.F.R. Part 63, Subpart DDDDD, Table 3. [40 C.F.R. §§ 63.7505(a) and (e), and 63.7540(d) and 40 C.F.R. Part 63, Subpart DDDDD, Table 3]

(2) During shutdown of Unit #5, FPLE Wyman shall comply with the work practice standards listed in item 6. of 40 C.F.R. Part 63, Subpart DDDDD, Table 3. [40 C.F.R. §§ 63.7505(a) and 63.7540(d) and 40 C.F.R. Part 63, Subpart DDDDD, Table 3]

c. Boiler Tune-ups

(1) Timing of Boiler Tune-ups

(i) As a boiler with a continuous oxygen trim system that maintains an optimum air-to-fuel ratio, Unit #5 is subject to tune-ups on a five-year basis. Each subsequent tune-up of Unit #5 shall be conducted no more than 61 months after the date of the previous tune-up. FPLE Wyman may delay the burner inspection specified in 40 C.F.R. § 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the burner must be inspected at least once every 72 months. [40 C.F.R. §§ 63.7515(d) and 63.7540(a)(12) and 40 C.F.R. Part 63, Subpart DDDDD, Table 3]

(ii) If Unit #5 is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 C.F.R. § 63.7540(a)(13) and 63.7515(g)]

(2) Boiler Tune-up Procedures

Each tune-up shall be conducted while burning the type of fuel (or fuels in the case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler over the five years prior to the tune-up according to the procedures in 40 C.F.R. § 63.7540(a)(10)(i) through (v). [40 C.F.R. § 63.7540(a)(10)(i) through (v)]

(3) Boiler Tune-up Report

FPLE Wyman shall maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 C.F.R. § 63.7540(a)(10)(vi)(A) through (C) regarding each boiler tune-up. [40 C.F.R. § 63.7540(a)(10)(vi)]

3. Emission Limits, Fuel Analyses, and Performance Tests

a. Fuel Analyses

For liquid fuels, FPLE Wyman shall conduct fuel analyses for chloride and mercury according to the following procedures and Table 6 to this subpart, as applicable. FPLE Wyman is not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability practices. [40 C.F.R. § 63.7521(a)]

(1) Fuel Pollutant Input Determination

(i) FPLE Wyman shall determine the concentration of pollutants in the fuel (mercury and chlorine) in units of lb/MMBtu of each composite sample for each fuel type according to the procedures in 40 C.F.R. § 63.7521(e) and Table 6 of this subpart. [40 C.F.R. § 63.7521(e)]

(ii) FPLE Wyman shall establish maximum fuel pollutant input levels for chlorine (Clinput) and mercury (Mercuryinput) according to the procedures in 40 C.F.R. § 63.7530(b). [40 C.F.R. § 63.7530(b)]

(2) Site-Specific Fuel Monitoring Plan

FPLE Wyman shall maintain a site-specific fuel monitoring plan according to the procedures and requirements in 40 C.F.R. § 63.7521(b)(1) and (2). [40 C.F.R. § 63.7521(b)]

(3) Fuel Switching

If FPLE Wyman plans to burn a new type of fuel or a mixture of fuels, the facility shall demonstrate compliance with Unit #5's HCl and mercury emission limits according to the procedures in 40 C.F.R. § 63.7540(a)(4) and (6), respectively. [40 C.F.R. § 63.7540(a)(4) and (6)]

b. Performance Tests

(1) Timing of Performance Tests

Subsequent performance tests for Unit #5 shall be conducted on an annual basis, with each subsequent test completed no more than 13 months after the previous performance test, except as specified in 40 C.F.R. § 63.7515(a) through (c). [40 C.F.R. § 63.7515(a) through (c)]

(2) Conduct of Performance Tests

FPLE Wyman shall develop a site-specific stack test plan according to the requirements in 40 C.F.R. § 63.7(c) and shall conduct all performance tests according to the specific conditions and requirements of 40 C.F.R. § 63.7(c-d), (f), and (h), 40 C.F.R. § 63.7520(a) through (f), and Tables 5 and 7 of this subpart. [40 C.F.R. § 63.7520(a-f)]

4. Monitoring and Recordkeeping Requirements

a. Operating Limits and Continuous Compliance Requirements

(1) Establishment of Operating Limits

FPLE Wyman shall establish operating limits and, if applicable, install, operate, and maintain all applicable CMS (including CPMS) according to 40 C.F.R. § 63.7525. If FPLE Wyman wishes to establish and monitor an alternative operating limit or alternative operating parameter, the facility shall apply to the EPA Administrator for approval under 40 C.F.R. § 63.8(f). FPLE Wyman shall meet each operating limit at all times Unit #5 is operating, except during periods of startup and shutdown during which time the facility shall comply with only items 5 and 6 of Table 3 of this subpart. The operating limits required for Unit #5 and its associated air pollution control equipment are as follows [40 C.F.R. §§ 63.7500(a)(2) and (f), 63.7505(a), 63.7525(a)(7), 63.7530(a) and (b), and 40 C.F.R. Part 63, Subpart DDDDD, Tables 4 & 7]:

(i) Oxygen Trim System

FPLE Wyman shall set the oxygen level on Unit #5's oxygen trim system no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 to this subpart.

(ii) Maximum Boiler Operating Load

FPLE Wyman shall establish a maximum boiler operating load operating limit as the highest hourly average operating load recorded during the facility's performance tests according to the requirements in item 5 of 40 C.F.R. Part 63, Subpart DDDDD, Table 7.

(2) Demonstrating Continuous Compliance

Operation above the established maximum operating limit shall constitute a deviation of established operating limits except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits shall be confirmed or reestablished during performance tests. FPLE Wyman shall demonstrate continuous compliance with the boiler operating load operating limit according to the applicable procedures in 40 C.F.R. Part 63, Subpart DDDDD, Table 8. FPLE Wyman shall demonstrate continuous compliance with the minimum

oxygen level operating limit by operating Unit #5's oxygen trim system at the level required by 40 C.F.R. § 63.7525(a)(7). [40 C.F.R. §§ 63.7505(c), 63.7525(a), & 63.7540(a)(1), and 40 C.F.R. Part 63, Subpart DDDDD, Table 8]

b. Monitoring Equipment

For each operating limit that requires the use of a CMS, FPLE Wyman shall install, operate, and maintain each CMS according to the procedures in 40 C.F.R. § 63.7525(d). [40 C.F.R. § 63.7525(d)]

c. Data Collection

FPLE Wyman shall monitor and collect CMS data (including CPMS data) according to the facility's site-specific monitoring plan as required by 40 C.F.R. § 63.7505(d) and the requirements in 40 C.F.R. § 63.7535(a) through (d). [40 C.F.R. § 63.7535(a) through (d)]

d. Site-Specific Monitoring Plan

(1) FPLE Wyman shall develop a site-specific monitoring plan for each CMS (including CPMS) required for compliance with this subpart's operating limits according to the procedures in 40 C.F.R. § 63.7505(d)(1) and (d)(2). [40 C.F.R. § 63.7505(d)(1) and (2)]

(2) FPLE Wyman shall conduct a performance evaluation of each CMS (including CPMS) in accordance with the facility's site-specific monitoring plan. [40 C.F.R. § 63.7505(d)(3)]

(3) FPLE Wyman shall operate and maintain each CMS (including CPMS) in continuous operation according to the facility's site-specific monitoring plan. [40 C.F.R. § 63.7505(d)(4)]

e. Recordkeeping Requirements

(1) FPLE Wyman shall maintain all records required by 40 C.F.R. § 63.7555(a) through (d) and 40 C.F.R. Part 63, Subpart DDDDD, Table 8.
[40 C.F.R. §§ 63.7540(a)(2) and 63.7555]

(2) These records, including all reports and notifications required by this subpart, shall be in a form suitable and readily available for expeditious inspection and review, according to 40 C.F.R. § 63.10(b)(1).
[40 C.F.R. § 63.7560(a)]

5. Fuel Switching

If FPLE Wyman switches fuels or makes a physical change to Unit #5 that results in the applicability of a different subcategory consistent with 40 C.F.R. § 63.7545(h), FPLE Wyman shall apply to amend their air emission license to address the changes including applicable requirements of Subpart DDDDD.

(19) **Diesel Generator**

A. Allowable Operation and Fuels

1. The Diesel Generator is licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

2. The Diesel Generator shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

B. Fuel Sulfur Content

1. The fuel oil sulfur content for the Diesel Generator shall be limited to 0.0015% sulfur by weight (15 ppm). [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

2. Fuel sulfur content compliance 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. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

C. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from the Diesel Generator shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.20	06-096 C.M.R. ch. 103, § 2.A.(1)

2. Emissions from the Diesel Generator shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	1.1	A-388-70-A-I (10/2/2002), BPT	Enforceable by State-only
PM_{10}	1.1	A-388-70-A-I (10/2/2002), BPT	
SO_2	0.01	06-096 C.M.R. ch. 140, BPT	
NO_X	16.8	A-388-70-E-R (4/26/2012), BPT	
CO	4.5	06-096 C.M.R. ch. 140, BPT	
VOC	0.5	A-388-70-E-R (4/26/2012), BPT	

D. Visible Emissions

Visible emissions from the Diesel Generator shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time FPLE Wyman may elect to comply with the following work practice standards in lieu of this visible emission standard: [06-096 C.M.R. ch. 101, § 3.A.(4)(a)]

1. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.

2. Operate the generator 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. At all times, operate the generator, including any associated air pollution control equipment, 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.

E. Periodic Monitoring

FPLE Wyman shall record data and maintain records of the following periodic monitoring values for the Diesel Generator whenever the equipment is operating.

Value	Units of Measure	Monitoring Tool/Method	Frequency
Fuel oil sulfur content	Percent, by weight	Fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired	As fuel is purchased
Operating time	Hours	Hour Meter	Monthly and annually

F. The Diesel Generator shall be operated in accordance with the emergency definition in 40 C.F.R. Part 63, Subpart ZZZZ. The unit shall be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). [40 C.F.R. §§ 63.6590(b)(3)(iii) and 63.6640(f)]

G. FPLE Wyman shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, including what classified the operation as emergency, and the number of hours the unit operated for non-emergency purposes.
[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

H. Emergency engines 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 engines are not to be used for prime power when reliable offsite power is available, nor used to supply power to an electric grid as part of a financial arrangement with an independent system operator or another entity. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

(20) **Specification Waste Oil**

For all specification waste oil burned at the facility, FPLE Wyman shall comply with all of the following:

A. Maintain records of at least one on-site generated waste oil characterization test result.

B. Maintain characterization test result records for all off-site generated waste oil fired.

C. Maintain a log recording the quantity of all specification waste oil burned in each unit.

D. Make all logs available to the Department upon request.

[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

(21) **Industrial Cleaning Solvents**

FPLE Wyman is exempt from the requirement of 06-096 C.M.R. ch. 166 per Section (3)(I) and shall maintain records of material purchase or use records sufficient to verify that less than 55 gallons of industrial cleaning solvent is used per calendar year.
[06-096 C.M.R. ch. 166, § 5(C)]

(22) **Parts Washers** [06-096 C.M.R. ch. 130]

Parts washers at FPLE Wyman are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

A. FPLE Wyman shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:

1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);

2. Wipe cleaning; and,

3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to cold cleaning machines that are subject to 06-096 C.M.R. ch. 130:

1. FPLE Wyman shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:

a. Waste solvent shall be collected and stored in closed containers.

b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.

c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.

d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.

e. Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned in the parts washer.

f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.

g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.

h. Work area fans shall not blow across the opening of the washer unit.

i. The solvent level shall not exceed the fill line.

2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches.

3. Each parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent.

(23) **Additional Annual Compliance Addendum**

FPLE Wyman shall submit an annual NO_x minimization update to the Department as an addendum to the annual compliance certification. The submittal shall list any one-time or ongoing activities at the facility performed in the previous calendar year to decrease NO_x emissions and increase the units' efficiency. [A-388-70-C-A (9/26/2007), BPT]

(24) **Annual Emission Statement** [06-096 C.M.R. ch. 137]

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, FPLE Wyman shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

B. FPLE Wyman shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:

1. The amount of #6 fuel oil fired in Units #1-5 (each) on a monthly basis;

2. The amount of distillate fuel fired in Units #3-5 and the Diesel Generator (each) on a monthly basis;

3. The amount of specification waste oil fired in Units #1-5 (each) on a monthly basis;

4. Records of CEMS data and stack tests, as required;

5. The sulfur content of the #6 fuel oil fired in Units #1-5;

6. The sulfur content of the distillate fuel fired in Units #3-5 and the Diesel Generator;

7. Hours each emission unit was operating on a monthly basis.

C. In reporting year 2020 and every third year thereafter, FPLE Wyman shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § 3.C. FPLE Wyman shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).
[38 M.R.S. § 353-A(1-A)]

(25) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a 5-minute block average basis.
[06-096 C.M.R. ch. 101, § 3.C.]

(26) **General Process Sources**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a six-minute block average basis.
[06-096 C.M.R. ch. 101, § 3.B.(4)]

(27) **CEMS Recordkeeping**

A. All CEMS and COMS required by this license shall meet the sampling and performance criteria specified in 40 C.F.R. Part 51, Subpart P, and shall be operated in accordance with the appropriate requirements of 40 C.F.R. Part 60, Appendix F, and 06-096 C.M.R. ch. 117, including:

1. Conducting Relative Accuracy Testing Audits (RATA) and/or Performance Audits in accordance with 06-096 C.M.R. ch. 117. FPLE Wyman shall verbally notify the Department 10 calendar days prior to conducting the CEMS and COMS audits. This notification shall also apply to all linearity audits as required by 40 C.F.R. Part 75, which shall be conducted rather than cylinder gas audits (CGA) due to the more stringent requirements of 40 C.F.R. Part 75;

2. Developing and maintaining an updated quality assurance plan for all CEMS and COMS in accordance with 40 C.F.R. Part 60, Appendix F and 06-096 C.M.R. ch. 117; and

3. Meeting the data recovery requirements of 06-096 C.M.R. ch. 117.

[06-096 C.M.R. ch. 117 and 40 C.F.R. Part 60]

B. For all of the CEMS and COMS required by this license, the licensee shall maintain records of the most current six-year period. These records shall include the following information:

1. Documentation which shows monitor operational status during all source operating time, including specifics for calibrations and audits [06-096 C.M.R. ch. 117];

2. Documentation that all CEMS and COMS are continuously accurate, reliable, and are operated in accordance with 06-096 C.M.R. ch. 117, 40 C.F.R. Part 51, Appendix P, and 40 C.F.R. Part 60, Appendices B and F
[06-096 C.M.R. ch. 117 and 40 C.F.R. Parts 51 and 60];

3. Complete data sets of all monitored emissions as specified in this license [06-096 C.M.R. ch. 117];

4. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 C.F.R. Part 51, Appendix P [06-096 C.M.R. ch. 117 and 40 C.F.R. Part 51]; and

5. Other data indicative of compliance with the applicable emission standards for those periods when the CEMS or COMS were not in operation or produced invalid

data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard. [06-096 C.M.R. ch. 140, BPT]

C. In order to meet the requirements of 40 C.F.R. Part 75, all CEMS and COMS, including fuel flow monitors, shall be in operation and monitoring unit emissions or opacity at all times the affected unit combusts any fuel except during periods of calibration, quality assurance, or preventative maintenance performed pursuant to 40 C.F.R. § 75.21 and Appendix B, periods of repair, periods of backup of data from the data acquisition and handling system, or periods of recertification performed pursuant to 40 C.F.R. § 75.20. [40 C.F.R. Part 75]

(28) **Parameter Monitor General Requirements**
[06-096 C.M.R. ch. 140 and 117]

A. Parameter monitors required by this license shall be installed, operated, maintained, and calibrated in accordance with manufacturer recommendations or as otherwise required by the Department.

B. Parameter monitors required by this license shall continuously monitor data at all times the associated emissions unit is in operation. "Continuously" with respect to the operation of parameter monitors required by this license means providing equally spaced data points with at least one valid data point in each successive 15-minute period. A minimum of three valid 15-minute periods constitute a valid hour.

C. Each parameter monitor must record accurate and reliable data. If any parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action. The Department may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the Department's satisfaction that the failure of the system to record such data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

Enforceable by State-only

(29) **Acid Rain Program**

A. Units 1-4 are all subject to and shall comply with all applicable requirements of the Acid Rain Program under 40 C.F.R. Parts 72, 73, 75 (Subparts A, B, C, D, F, and G), 77, and 78. [40 C.F.R. § 72.6(a)(1)]

B. FPLE Wyman shall maintain the following records on an hourly basis for Units #1-#4 (each) pursuant to 40 C.F.R. Part 75 [40 C.F.R. Part 75, Subpart F]:

1. Heat input;
2. Operating time;
3. Load and load range;
4. Date and hour (and minute for opacity) for each recorded value;
5. For SO_2:
   a. Hourly flow rate of oil (bbl/hr);
   b. Sulfur content (%) from bulk storage tanks;
   c. Method of oil sampling;
   d. Mass of oil combusted each hour (lb/hr); and
   e. Hourly SO_2 mass emissions (lb/hr).
6. For NO_x:
   a. Concentration (ppm);
   b. Diluent gas concentration ($\%O_2$ or $\%CO_2$);
   c. Emission rate (lb/MMBtu); and
   d. Method of determination for hourly average NO_x emission rate.
7. For CO_2:
   a. Concentration (%);
   b. 40 C.F.R. Part 75, Appendix G (mass emissions in tons based on fuel oil analysis); and
   c. Mass emissions (tons/hr).
8. For opacity:
   a. Average opacity for each six-minute averaging period; and
   b. Exceedances.
9. All monitor % data availability;
10. Data and information required by 40 C.F.R. § 75.55 for specific situations; and
11. Certification test data and information required in 40 C.F.R. § 75.56.

C. FPLE Wyman shall submit a quarterly electronic data report (EDR) to EPA pursuant to 40 C.F.R. Part 75 for Units #1-#4. [40 C.F.R. Part 75, Subpart G]

(30) **Compliance Assurance Monitoring (CAM) – General Requirements**

A. The licensee shall operate and monitor all emission units and their associated control equipment in accordance with the approved CAM Plan. [40 C.F.R. Part 64]

B. Any excursion shall be reported in semiannual reports. If excursions occur, the licensee must also certify intermittent compliance with the emission limits for the control device monitored in the annual compliance certification. [40 C.F.R. Part 64]

C. Upon detecting an excursion, the licensee shall restore normal operation of the control equipment as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 C.F.R. § 64.7(d)]

D. Prior to making any changes to the approved CAM plan, the licensee shall notify the Department and, if necessary, submit a proposed license modification application to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 C.F.R. § 64.7(e)]

E. Any change of the target level shall be submitted in a letter to the Department for written approval. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

(31) **Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following for the control equipment, parameter monitors, CEMS, and COMS required by this license. [06-096 C.M.R. ch. 117]

A. All control equipment downtimes and malfunctions;
B. All CEMS or COMS downtimes and malfunctions;
C. All parameter monitor downtimes and malfunctions;
D. All excess events of emission and operational limitations set by this Order, Statute, state regulations, or federal regulations, as appropriate. The following information shall be reported for each excess event;

1. Standard exceeded;
2. Date, time, and duration of excess event;
3. Amount of air contaminant emitted in excess of the applicable emission standard, expressed in the units of the standard;
4. A description of what caused the excess event;
5. The strategy employed to minimize the excess event; and
6. The strategy employed to prevent reoccurrence.

E. A report certifying there were no excess emissions, if that is the case.

(32) **Semiannual Reporting** [06-096 C.M.R. ch. 140]

A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.

B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date.

C. Each semiannual report shall include a summary of the periodic and CAM monitoring required by this license.

D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(33) **Annual Compliance Certification**

FPLE Wyman shall submit an annual compliance certification to the Department and EPA in accordance with Standard Condition (13) of this license. The annual compliance certification is due **January 31st** of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 C.M.R. ch. 140]

(34) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
06-096 C.M.R. ch. 102	Open Burning	-
06-096 C.M.R. ch. 109	Emergency Episode Regulations	-
06-096 C.M.R. ch. 110	Ambient Air Quality Standards	-
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques	-
38 M.R.S. § 585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(35) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs. [40 C.F.R. Part 82, Subpart F]

(36) **Asbestos Abatement**

When undertaking Asbestos abatement activities, FPLE Wyman shall comply with the *Standard for Asbestos Demolition and Renovation*, 40 C.F.R. Part 61, Subpart M.

(37) **CO_2 Budget Source**

FPLE Wyman shall continue to comply with the requirements of license A-388-78-A-N, issued January 15, 2009, per Maine's *CO_2 Budget Trading Program*, 06-096 C.M.R. ch. 156 for Units #1-#4. [06-096 C.M.R. ch. 156]
Enforceable by State-only

(38) **Risk Management Plan**

The licensee is subject to all applicable requirements of *Risk Management Plan*, 40 C.F.R. Part 68.

(39) **Expiration of a Part 70 license**

A. FPLE Wyman shall submit a complete Part 70 renewal application at least six but no more than 18 months prior to the expiration of this air license.

B. Pursuant to Title 5 M.R.S. §10002, and 06-096 C.M.R. ch. 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under 06-096 C.M.R. ch. 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

(40) **New Source Review**

FPLE Wyman is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emission license, and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emissions License, A-388-70-G-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 14th DAY OF MAY, 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____ for ____
GERALD D. REID, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

[Note: If a complete renewal application, as determined by the Department, is submitted at least six but no more than 18 months prior to expiration of the facility's Part 70 license, then pursuant to Title 5 M.R.S. §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the Part 70 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 30, 2016
Date of application acceptance: July 5, 2016

Date filed with the Board of Environmental Protection:

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

FILED

MAY 14, 2020

State of Maine
Board of Environmental Protection