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

DEPARTMENT ORDER

Naval Computer and Telecommunications Area Master Station Atlantic Detachment Cutler **Washington County** **Cutler, Maine** **A-210-77-3-A**	**Departmental** **Findings of Fact and Order** **New Source Review** **NSR #3**

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Naval Computer and Telecommunications Area Master Station Atlantic Detachment (NCTAMS LANT DET)
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	9711 National Security (Federal Facility) 4911 Electrical Power Generation 3443 Oil Storage Tanks
NATURE OF BUSINESS	Naval communications, electricity generation, space heating
FACILITY LOCATION	Route 191, Cutler, Maine

Naval Computer and Telecommunications Area Master Station Atlantic Detachment Cutler (NCTAMS LANT DET, also referred to as the Naval Support Activity (NSA) Cutler facility or the Cutler facility) generates electricity from diesel engines to operate communications equipment and operate those and other fuel burning equipment for space heating requirements.

The Cutler facility has the potential to emit more than 100 tons per year (TPY) of Nitrogen Oxides (NOx) and Carbon Dioxide (CO); therefore, it is a major source for the two criteria pollutants. The Cutler facility does not have the potential to emit more than 10 TPY of any single hazardous air pollutant (HAP) or any specified HAP group, or more than 25 TPY of total HAP; therefore, it is considered an area source for HAP.

B. NSR License Description

The Cutler facility has requested a New Source Review (NSR) license to make the following changes:

- Replace the stacks and silencers that the diesel engines (VLF-103-D#2 – D#5) exhaust into;
- Install Crankcase Ventilation Systems on each of the engines;
- Install diesel oxidation catalyst (DOC) units onto the main diesel engines (VLF-103-D#2 – D#5) and onto the auxiliary generator (VLF-103-D#6) to achieve compliance with *National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 CFR Part 63, Subpart ZZZZ; and
- Include fuel sulfur requirements of 38 M.R.S. § 603-A(2)(A)(3)

The Cutler facility has also requested to amend NSR A-210-77-1-A, dated 12/30/2014; and NSR A-210-77-2-A, dated 07/04/2014 in the following ways:

A-210-77-1-A
- Correct the size of previously licensed boilers (VLF-103-B#7 [Boiler 1] & VLF-103-B#8 [Boiler 2])[1];
- Adjust the boilers' fuel limit to be consistent with the size change;
- Clarify allowable concurrent operating scenarios in Condition (3) for the non-emergency engines; and
- Correct the specified sulfur content of the fuel combusted in Boiler #15.

A-210-77-2-A
- Remove the 14 MUSE Generators and associated fuel tanks.

[1] VLF-103-B#7 and VLF-103-B#8 are labelled Boiler1 and Boiler two, respectively, at the source.

C. Emission Equipment

The following equipment is addressed in this NSR license:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur
VLF-103-B#7	3.98 *(previously 3.0)*	29.0 *(previously 27.5)*	Distillate Fuel, 0.0015% sulfur by weight
VLF-103-B#8	3.98 *(previously 3.0)*	29.0 *(previously 27.5)*	Distillate Fuel, 0.0015% sulfur by weight
VLF-100-B#15	2.6	18.8	Distillate Fuel, 0.0015% sulfur by weight[2]

Non-Emergency Generators

Equipment	Maximum Input Capacity (MMBtu/hr)	Maximum Output Capacity (kW)	Unit Type	Fuel, % sulfur
VLF-103-D#2	32.0	3000	Electrical Generation	Distillate Fuel, 0.0015% by weight
VLF-103-D#3				
VLF-103-D#4				
VLF-103-D#5				
VLF-103-D#6	8.0	750	Electrical Generation	

Non-Emergency Generators (New Controls / Stacks)

Equipment	Pollutant Controlled	Control Equipment, Control Efficiency	Control Installation Date	Stack[3]	Stack Replacement Date
VLF-103-D#2	CO	Diesel Oxidation Catalyst, 70% or to 23 ppmvd @ 15% O_2	09/2016	VLF-103-D#2	09/2016
VLF-103-D#3	CO	Diesel Oxidation Catalyst, 70% or to 23 ppmvd @ 15% O_2	10/2016	VLF-103-D#3	10/2016
VLF-103-D#4	CO	Diesel Oxidation Catalyst, 70% or to 23 ppmvd @ 15% O_2	10/2016	VLF-103-D#4	10/2016

[2] distillate fuel with a sulfur content of 0.5% by weight purchased or otherwise obtained prior to July 1, 2018 may be used in VLF-100-B#15

[3] Stack titles have not previously been established; however, each unit exhausts into its own stack. Stacks in this license will be denoted by the names of the units that exhausts into them.

Equipment	Pollutant Controlled	Control Equipment, Control Efficiency	Control Installation Date	Stack[3]	Stack Replacement Date
VLF-103-D#5	CO	Diesel Oxidation Catalyst, 70% or to 23 ppmvd @ 15% O_2	11/2016	VLF-103-D#5	11/2016
VLF-103-D#6	CO	Diesel Oxidation Catalyst, 70% or to 23 ppmvd @ 15% O_2	09/2016	VLF-103-D#6	09/2016

Emergency Generators (Removed)

Equipment	Maximum Input Capacity (MMBtu/hr)	Maximum Output Capacity	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur	Stack #
VLF-MUSE-1A	8.2	Each unit: 840 kW (approx. 1170 hp)	57.4	Distillate Fuel, 0.0015% sulfur	Stack-MUSE-1A
VLF-MUSE-1B	8.2		57.4		Stack-MUSE-1B
VLF-MUSE-1C	8.2		57.4		Stack-MUSE-1C
VLF-MUSE-1D	8.2		57.4		Stack-MUSE-1D
VLF-MUSE-3A	8.2		57.4		Stack-MUSE-3A
VLF-MUSE-3B	8.2		57.4		Stack-MUSE-3B
VLF-MUSE-3C	8.2	Each unit: 840 kW (approx. 1170 hp)	57.4	Distillate Fuel, 0.0015% sulfur	Stack-MUSE-3C
VLF-MUSE-3D	8.2		57.4		Stack-MUSE-3D
VLF-MUSE-3E	8.2		57.4		Stack-MUSE-3E
VLF-MUSE-5A	8.2		57.4		Stack-MUSE-5A
VLF-MUSE-5B	8.2		57.4		Stack-MUSE-5B
VLF-MUSE-5C	8.2		57.4		Stack-MUSE-5C
VLF-MUSE-5D	8.2		57.4		Stack-MUSE-5D
VLF-MUSE-14	8.2		57.4		Stack-MUSE-14

MUSE Fuel Tank[4] (Removed)

Tank ID	Capacity (gallons)	Material Stored	Tank Type	Tank Size (dimensions in ft)
MUSE Tank #1	16,890 (63.94 m^3)	Distillate Fuel	Double-Walled Steel	8 (wide) x 40 (long) x 9.5 (tall)

[4] Table lists all applicable tanks above minimum licensing thresholds, pursuant to 06-096 C.M.R. ch. 115. All insignificant MUSE fuel tanks have also been removed.

D. Definitions

Distillate Fuel. For the purposes of this license, *distillate fuel* means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

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 the Cutler facility does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements. This application does, however, seek to modify a Best Available Control Technology (BACT) analysis performed per New Source Review.

The modification of a major source is considered a major or minor modification based on whether or not expected emissions increases exceed the "Significant Emission Increase" levels as given in *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100.

The emission increases are determined by subtracting the baseline actual emissions of the 24 months preceding the modification (or representative 24 months) from the projected actual emissions. The projected actual emissions were calculated based on required 06-096 C.M.R. ch. 137 reporting data with the unit inventory and CO control efficiency accounted for. The results of this comparison are as follows:

Pollutant	Baseline Actual Emissions *1/14-12/15* (ton/year)	Projected Actual Emissions (ton/year)	Net Emissions Increase (ton/year)	Significant Emissions Increase Levels (ton/year)
PM	4.5	4.5	--	25
PM_{10}	4.5	4.5	--	15
$PM_{2.5}$	4.5	4.5	--	10
SO_2	0.2	0.2	--	40
NO_x	299.4	298.7	- 0.7	40
CO	79.2	55.5	- 24.7	100
VOC	7.9	7.9	--	40
CO_2e	< 75,000	< 75,000	< 75,000	75,000

Note: The above values are only for the following units addressed in this NSR license:

- VLF-103-B #7 & #8;
- VLF-100-B #15;
- VLF-103-D #2 - #6; and
- Removal of the MUSE engines

None of the other equipment at the facility is affected by this NSR license.

Therefore, this NSR license is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations,* 06-096 C.M.R. ch. 115. Because the changes being made in this NSR license are inconsistent with emission limitations in the Part 70 air emission license, an application to incorporate the requirements of this NSR license into the Part 70 air emission license has been submitted and will be processed concurrently with the facility's Part 70 air emission license renewal currently in process.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

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

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

B. Facility Description

NCTAMS LANT DET is licensed to operate emission sources associated with its naval computer and communications center in Cutler, Maine. The license includes the High Frequency (HF) Antenna Array Area[5]; the Very Low Frequency (VLF) Antenna Array Site, which includes he VLF Power Plant and the VLF Transmitter Area; and a fire station designated as Building 503. The Cutler facility is an active Naval Computer and Telecommunications Station staffed by civilian government workers for the operation of HF and VLF transmitters, providing HF and VLF communications to the operating forces of the Atlantic Fleet and Northeast Region Shore Commands. Emissions sources at the

[5] The HF Antenna Array Site is currently decommissioned, but will remain on the license.

Cutler facility generate electricity from distillate fuel-fired generators and produce heat for space heating requirements.

C. Control Device Installation and Stack Replacements for Non-Emergency Engines

1. Project Description

The Cutler Facility installed Diesel Oxidation Catalysts (DOC) onto the exhausts and replaced associated stacks for VLF-103-D#2; VLF-103-D#3; VLF-103-D#4; VLF-103-D#5, and installed a DOC on VLF-103-D#6 while maintaining the same stack. The changes were in response to a 04/12/2017 Consent Agreement with EPA regarding the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ.

The DOCs were installed in September through November of 2016 and meet the following control standards:

Pollutant	Control Efficiency
CO	70% or to 23 ppmvd @ 15% O_2

The stacks at the Cutler facility were replaced as part of the addition of CO controls in order to provide optimal source maintenance moving forward. The stacks have dimensions consistent with those of the old stacks and therefore do not affect emissions modeled for A-210-77-1-A.

Crankcase ventilation and filtration systems were installed for each of the engines as part of the stack replacement project in accordance with the requirements of 40 C.F.R. Part 63, Subpart ZZZZ.

2. BACT/BPT Findings

Due to the installation of control equipment on the engines, pursuant to 40 C.F.R. Part 63, Subpart ZZZZ, the lb/hr limits for CO have been revised for that pollutant. The following are the new emission limits for CO and their bases:

Unit	Emission Limit	Emission Limit Basis
VLF-103-D#2	70% reduction or 23 ppmvd @ 15% O_2	40 C.F.R. § 63.6603(a) and Table 2d(3)
VLF-103-D#3		
VLF-103-D#4		
VLF-103-D#5		
VLF-103-D#6		
VLF-103-D#2	19.04 lb/hr	70% of pre-controlled lb/hr limit A-210-70-B-A (3/18/2004), and A-210-70-D-R (6/19/2012)
VLF-103-D#3		
VLF-103-D#4		
VLF-103-D#5		
VLF-103-D#6	4.76 lb/hr	70% of pre-controlled lb/hr limit A-210-70-B-A (3/18/2004)

3. 40 C.F.R. Part 63, Subpart ZZZZ

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to engines listed above. The units are considered existing, non-emergency stationary reciprocating internal combustion engines with output capacities of more than 500 brake HP at an area HAP source. The units are not subject to New Source Performance Standards regulations, which would supersede Subpart ZZZZ requirements and EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements. [40 C.F.R. § 63.6585]

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

a. Emission and Operating Limitations

Classification	Emission Limits (except during startup)	Operating Requirements
Non-Emergency, non-black start CI Stationary RICE >500 HP at an area source of HAP *VLF-1030-D#2* *VLF-1030-D#3* *VLF-1030-D#4* *VLF-1030-D#5* *VLF-1030-D#6*	Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15% O_2; or Reduce CO emissions by 70% or more. [40 C.F.R. § 63.6603(a) and Table 2d(3)]	1. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test. 2. Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. [40 C.F.R. § 63.6603(a) and Table 2b(2)(b)] 4. Minimize each engine's time spent at idle during startup and minimize each engine's startup time to a period needed for appropriate and safe loading for each engine. Startup time shall not exceed 30 minutes, after which time the non-startup emission limitations apply [40 C.F.R. Part 63, Subpart ZZZZ Table 2d]
	The engines are equipped with diesel oxidation catalysts to comply with the emission limits.	5. Fire diesel fuel with a sulfur content not to exceed 15 ppm sulfur (0.0015% sulfur) by weight. [40 C.F.R. § 63.6640(a)]

b. Crankcase Filtration
The Cutler facility was required to install closed crankcase ventilation systems, or other applicable control devices, according to the requirements of § 63.6625(g).

The Cutler facility installed crankcase ventilation and filtration systems on each of the applicable engines as part of the stack replacement and control installation project in order to comply with this requirement.

c. Continuous Parameter Monitoring System
The Cutler facility is required to install either a continuous emission monitoring system (CEMS) or a continuous parameter monitoring system (CPMS) to comply with the operational and emission requirements of 40 C.F.R. Part 63, Subpart ZZZZ, according to Table 5 of the subpart. [40 C.F.R. § 63.6625, and Table 5]

The Cutler facility complies with this requirement by utilizing CPMS on each engine which were installed with the controls.

The Cutler facility shall operate and maintain each CPMS according to the following:

(1) The Cutler facility must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in § 63.6625(b)(1)(i-v).[6]
(2) Each CPMS shall be operated and maintained according to the procedures in the site-specific monitoring plan.
(3) The CPMS shall collect data at least once every 15 minutes.[7]
(4) For each CPMS for measuring temperature range, the temperature sensor shall have a minimum tolerance of 2.8 °C (5 °F) or 1% of the measurement range, whichever is larger.
(5) The Cutler facility shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other auditing procedures specified in its site-specific monitoring plan at least annually.
(6) Except for monitoring malfunctions[8], associated repairs, required performance evaluations, and required quality assurance or control activities, the Cutler facility shall monitor continuously at all times that each applicable engine is operating. The Cutler facility shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The Cutler facility shall, however, use all valid data collected during all other periods.
(7) The Cutler facility shall monitor the catalyst inlet temperature and reduce this data to 4-hour rolling averages to demonstrate compliance with the limitations on the catalyst inlet temperature range.
(8) For any month in which any applicable engine operated, the Cutler facility shall monitor the pressure drop across the respective catalyst once per month to demonstrate compliance with the operating limit established during the last performance test.
[40 C.F.R. §§ 63.6625, 63.6635, 63.6640(a) and Table 6(10)]

d. General Requirements
The Cutler facility shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to it at all times. The Cutler facility shall operate and maintain all applicable engines and associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the facility to make any further efforts to reduce emissions if levels required by this standard have been

[6]The Cutler facility prepared this monitoring plan upon installation of the controls and CPMS in the engines.
[7] Except as allowed in the Demonstrating Continuous Compliance part of this section.
[8] A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

achieved. Determination of whether such operations and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Initial Performance Test

The Cutler facility was required to conduct an initial performance test within 180 days after the specified compliance date. [40 C.F.R. §§ 63.6612(a) and 63.6630, and Tables 4(3) and 5(2)]

The Cutler facility completed initial performance tests on the engines in September and December of 2016, after the installation of control equipment on each unit.

f. Subsequent Performance Tests

The Cutler facility is required to conduct subsequent performance tests on each of the units every 8,760 hours of operation or 3 years, whichever comes first. The Cutler facility shall conduct the tests in accordance with 40 C.F.R. § 63.6620 and Table 4 of the subpart.[9] [40 C.F.R. § 63.6620, Table 3(2) and Table 4(3)]

g. Notifications and Reports

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

(2) The Cutler facility shall submit all of the applicable notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) by the dates specified. [40 C.F.R. § 63.6645]

(3) Performance Tests

The Cutler facility shall submit a Notification of Intent to conduct a performance test at least 60 days before each performance test is scheduled to begin. [40 C.F.R. § 63.7(b)(1) and 63.6645(g)]

(4) Notification of Compliance Status

The Cutler facility was required to submit a Notification of Compliance Status before the close of business on the 60th day following the completion of the initial performance test.[10] [40 C.F.R. § 63.9(h)(2)(ii), 63.10(d)(2), and 63.6645(g) and (h)(2)]

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[9] Applicable notification dates are outlined in the "Notifications and Reports" part of this section.

[10] The Cutler facility submitted two Notifications of Compliance Status on 10/12/2016 and 12/03/2016, based on initial performance testing dates.

(5) Semiannual Compliance Reports
The Cutler facility shall submit Semiannual Compliance Reports according to § 63.6650 and Table 7 of the subpart. The Semiannual Compliance Reports may be submitted on the dates specified in Condition (27) of the Title V permit (with or as a part of the Semiannual Report), or according to § 63.6650(b)(1)-(4). [40 C.F.R. § 63.6650(b) and (f) and Table 7(1)]

(6) Semiannual Compliance Reports Content
The compliance reports required under this subpart shall include the following information:

(a) Organization name and address;
(b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
(c) The date of report and beginning and ending dates of the reporting period;
(d) If the facility had a malfunction during the reporting period, the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of the actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction;
(e) If the facility did not have any deviations from any applicable emission or operating limitation, statement that there were no deviations from the emission or operating limitations during the reporting period;
(f) If there were no periods during which the CPMS was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period; and
(g) For each deviation from an emission or operating limitation, the following information:
- The date and time that each malfunction started and stopped;
- The date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;
- The date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8);
- A summary of the total duration of the deviation during the reporting period, and the total duration as the percent of the total source operating time during the reporting period;
- A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

- A summary of the total duration of CPMS downtime during the reporting period, and the total duration of the CPMS downtime as a percent of the total operating time of the engine at which the CPMS downtime occurred during that reporting period;
- An identification of each parameter and pollutant (CO) that was monitored at the engine;
- A brief description of the applicable engine;
- A brief description of the applicable CPMS;
- The date of the latest CPMS certification or audit; and
- A description of any changes in CMS, processes, or controls since the last reporting period.

[40 C.F.R § 63.6650(c) and (e)]

h. Recordkeeping

The Cutler facility shall keep the following records:

(1) A copy of each notification and report that has been submitted to comply with this subpart, including all documentation supporting the Initial Notification and Notification of Compliance Status, according to the requirement in § 63.10(b)(2)(xiv);

(2) Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment;

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(vii);

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment;

(5) Records of action taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;

(6) For each CPMS:

(a) Records described in § 63.10(b)(2)(vi)-(xi),

(b) Previous versions of the performance evaluation plan as required in § 63.8(d)(3), and

(c) Requests for alternatives to the relative accuracy test for CPMS as required in § 63.8(f)(6)(i), if applicable;

(7) Records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation;

(8) Records of maintenance conducted on each engine in order to demonstrate that they, and their control devices, were operated and maintained according to the facility's maintenance plan.

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

D. Fuel Sulfur Content Requirements

VLF-103-D#6 is currently licensed to fire distillate fuel which, by definition, has a sulfur content of 0.05% or less by weight, however, this unit shares a tank with the other non-emergency engines, which are required to burn distillate fuel with a sulfur content that does not exceed 0.0015% by weight. Therefore, VLF-103-D#6 shall only fire distillate fuel with a sulfur content of 0.0015% or less. All licensed fuel limits for this unit that specify sulfur content shall remain in effect, replacing any given sulfur content with 0.0015% sulfur by weight.

E. Amendment to A-210-77-1-A (12/29/2014)

1. VLF-103-B#7 and VLF-103-B#8 Size Correction and Fuel Limit Change

a. Amendment Description

Package boilers VLF-103-B#7 [Boiler 1] and VLF-103-B#8 [Boiler 2] were licensed in A-210-77-1-A to replace an existing boiler, VLF-103-B#6, which was removed from service. VLF-103-B#7 and VLF-103-B#8 were both licensed and modeled with maximum input capacities of 3.0 MMBtu/hr. During a compliance inspection, it was discovered that the actual maximum input capacities of each boiler is 3.98 MMBtu/hr. Therefore, the Cutler facility has requested that the sizes of both boilers be corrected within the license.

In addition, the Cutler facility has requested that the fuel limit for Boilers #7 and #8, which was based on 8,760 hours of operation of one unit, also be adjusted proportionally.

These correction affects the lb/hr limits for each of the boilers and increase total allowable annual emissions by less than 1 ton for each pollutant.

The Cutler facility previously submitted an ambient air quality analysis (license A-210-77-1-A) in 2014 demonstrating that emissions from the facility do not violate National Ambient Air Quality Standards. Based on the maximum predicted impacts from the modeling, the relatively small increase in emissions due to the boiler size correction, and the intermittent nature of boiler operation,

the Department has determined that additional ambient air quality analysis is not required at this time.

b. Department Determination

Based on the existing emission factors, the following are the BACT emission limits for VLF-103-B#7 and VLF-103-B#8 for the updated maximum input capacity values:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
VLF-103-B#7	PM	0.12	06-096 CMR 103(2)(B)(1)(a)
VLF-103-B#8			

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
VLF-103-B #7	0.48	0.48	0.48	0.006	0.58	0.15	0.01
VLF-103-B #8	0.48	0.48	0.48	0.006	0.58	0.15	0.01

Because the change in firing rate values are smaller than the change in maximum input capacities,[11] the PM, PM_{10}, $PM_{2.5}$, and SO_2 lb/hr limits, which have emission factors based on input capacity, have increased more than the lb/hr limits for NO_x, CO, and VOC, which have emission factors based on firing rate.

Fuel Limit
Consistent with the size adjustment, the combined quantity of distillate fuel fired in VLF-103-B #7 and #8 shall not exceed 254,040 gallons per year on a 12-month rolling total basis, the equivalent of operating one boiler at its maximum firing rate for 8760 hours.

2. Allowable Concurrent Operating Scenarios for Non-Emergency Engines

Cutler has requested that allowable operating scenarios where VLF-103-D#2-#5 may operate concurrently be clarified in Condition (3) to include testing, maintenance, equipment upgrades, and training. The applicable section reads as follows:

D. *At any one time, Cutler shall operate only one of the Units VLF-103-D#2, VLF-103-D#3, VLF-103-D#4, or VLF-103-D#5 but not two or more concurrently, except during periods when one of the units is being brought*

[11] The Maximum Firing Rate values were correct for the sizes of the boilers; however, they were based on the firing of fuel with a heating value of ~0.145 MMBtu/gal. The firing rate values are now based on the firing of diesel fuel with a heating value of 0.137 MMBtu/gal.

off-line and another is being brought on-line. Operational records shall be maintained documenting compliance with this requirement.

The above limitation notwithstanding, Cutler may operate more than one of these units concurrently ***for short periods of time for emergency purposes (i.e., de-icing)****, but such concurrent operation shall not exceed 100 hours per year. Cutler shall document the reason for concurrent operation and the total number of hours that two or more units are operating concurrently in this emergency mode and make these records available upon request. [06-096 CMR 115, BPT]*

The Department has determined that this change is allowable because it provides needed and practical flexibility to the Cutler facility and does not increase allowable emissions.

Allowable Fuel Sulfur Content for VLF-100-B#15

Cutler requested in an application received on 04/01/2016 that VLF-100-B-#15 (Boiler #15) be licensed to fire distillate fuel with a maximum sulfur content of 0.5% sulfur by weight according to NSR license A-210-77-1-A. Boiler #15 was licensed to fire distillate fuel with a maximum sulfur content of 0.0015% by weight in A-210-77-1-A. The NSR was subsequently incorporated into the Cutler Facility's Title V license in A-210-70-G-A, which licensed the boiler to fire distillate fuel with a sulfur content not to exceed 0.5% by weight. In both cases, the calculated emission limits for SO_2 were consistent with those of emission factors for the respective sulfur contents. The correct sulfur content of the distillate fuel burned in VLF-100-B#15 was 0.5% sulfur by weight as expressed in A-21-70-G-A. The difference between the two licenses was due to an oversight which is being corrected in this NSR license.
SO_2 emissions from Boiler #15 shall be limited to the following, based on an emission factor of 0.5 lb/MMBtu for the firing of distillate fuel with a sulfur content not to exceed 0.5% by weight: [06-096 C.M.R. ch. 115, BACT]

Pollutant	Limit (lb/hr)
SO_2	1.30

All other BACT emission limits will remain as identified in A-210-77-1-A.

Notwithstanding this adjustment, as discussed in the "Fuel Sulfur Content Requirements" section of the Findings of Fact, 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, beginning

July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Boiler #15 shall not exceed 0.0015% by weight (15 ppm).

Due to the date of issuance of this license, this change effectively allows The Cutler Facility to burn distillate fuel with a sulfur content of up to 0.5% by weight in Boiler #15 purchased or otherwise attained prior the effective date of the fuel sulfur limitations in 38 M.R.S. § 603-A(2)(A)(3).

F. Amendment to A-210-77-2-A (08/01/2014)

NCTAMS LANT DET installed 14 generators (the MUSE units) to assist while the Cutler facility's main generators were down or during periods of deicing; this was addressed in NSR license A-210-77-2-A, dated 08/04/2014. All MUSE units and their associated fuel storage tanks were removed in November 2015 as the main generators were then all back online. The Cutler facility does not anticipate that there will be a need for the MUSE units, and the units have all been removed from the site. The Cutler Facility has therefore requested that these units and associated fuel storage tanks be removed from their license through NSR. All conditions specific to the MUSE Units will be removed in the order of the above referenced NSR license.

G. Incorporation Into the Part 70 Air Emission License

The requirements in this 06-096 C.M.R. ch. 115 New Source Review license shall apply to the facility upon issuance. Per *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140 § 1(C)(8), for a modification at the facility that has undergone NSR requirements or been processed through 06-096 C.M.R. ch. 115, the source must apply for an amendment to its Part 70 license within one year of commencing the proposed operations, as provided in 40 C.F.R. Part 70.5. Because requirements of this NSR license are inconsistent with those of the facility's Part 70 license, the Cutler facility submitted an application to incorporate NSR requirements into its Part 70 license with the NSR application, which will be incorporated into the Part 70 license renewal currently in process.

H. Annual Emissions

1. Emission Totals

The Cutler facility shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on emission limits presented in A-210-70-G-A, dated 10/24/2016, with a correction in the calculations for emissions from the non-emergency engines; The installation of controls on the non-emergency engines; size corrections and a fuel limit change for

VLF-103-B #7 & #8; fuel sulfur content corrections for VLF-100-B #15; and the removal of the MUSE engines.

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
VLF-103-B #7 & #8	2.1	2.1	0.1	2.6	0.7	0.1
VLF-100-B #15	0.2	0.2	5.7	1.7	0.4	0.03
Non-Emergency Engines	14.8	14.8	0.3	549.0	102.1	17.2
Emergency Engines	0.1	0.1	--	0.4	0.1	0.1
Total TPY	**17.2**	**17.2**	**6.1**	**553.7**	**103.3**	**17.5**

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans,* 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100 are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO_2e).

The quantity of CO_2e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting,* 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The Cutler facility 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. An additional ambient air quality analysis is not required for this NSR license.

ORDER

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

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

The Department hereby grants New Source Review License A-210-77-3-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the specific conditions below.

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.

SPECIFIC CONDITIONS

(1) VLF-103-D#6 CO Emission Limits and Fuel Use Requirements

A. CO emissions from VLF-103-D #6 shall not exceed the following:

Unit	Emission Limit	Origin and Authority
VLF-103-D#6	70% reduction or 23 ppmvd @ 15% O_2	40 C.F.R. § 63.6603(a) and Table 2d(3)
	4.76 lb/hr	06-096 C.M.R. ch. 115, BPT

B. Fuel

1. Total fuel use for VLF-103-D#6 shall not exceed 133,000 gal/yr of distillate fuel on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
2. Distillate fuel fired in VLF-103-D#6 shall have a maximum sulfur content that does not exceed 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
3. Compliance shall be demonstrated with on-site fuel use records and purchase record from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT/BACT]

(2) **VLF-103-D#2 - D#6; *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,* 40 C.F.R. Part 63, Subpart ZZZZ**

The Cutler facility shall comply with all applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following for non-emergency engines VLF-103-D #2 - #6:

A. Emission and Operating Limitations

Classification	Emission Limits (except during startup)	Operating Requirements
Non-Emergency, non-black start CI Stationary RICE >500 HP at an area source of HAP	Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15% O_2; or Reduce CO emissions by 70% or more. [40 C.F.R. § 63.6603(a) and Table 2d(3)]	1. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test. 2. Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. [40 C.F.R. § 63.6603(a) and Table 2b(2)(b)] 6. Minimize each engine's time spent at idle during startup and minimize each engine's startup time to a period needed for appropriate and safe loading for each engine. Startup time shall not exceed 30 minutes, after which time the non-startup emission limitations apply [40 C.F.R. Part 63, Subpart ZZZZ Table 2d]
	The engines are equipped with diesel oxidation catalysts to comply with the emission limits.	7. Fire diesel fuel with a sulfur content not to exceed 15 ppm sulfur (0.0015% sulfur) by weight. [40 C.F.R. § 63.6640(a)]

1. Continuous Parameter Monitoring System
   The Cutler facility shall operate and maintain each CPMS according to the following:
   a. The Cutler facility must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in § 63.6625(b)(1)(i-v).[12]
   b. Each CPMS shall be operated and maintained according to the procedures in the site-specific monitoring plan
   c. The CPMS shall collect data at least once every 15 minutes[13].
   d. For each CPMS for measuring temperature range, the temperature sensor shall have a minimum tolerance of 2.8 °C (5 °F) or 1% of the measurement range, whichever is larger.

[12]The Cutler facility prepared this monitoring plan upon installation of the controls and CPMS in the engines.
[13] Except as allowed in the Demonstrating Continuous Compliance part of this section.

e. The Cutler facility shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other auditing procedures specified in its site-specific monitoring plan at least annually.
f. Except for monitoring malfunctions[14], associated repairs, required performance evaluations, and required quality assurance or control activities, the Cutler facility shall monitor continuously at all times that each applicable engine is operating. The Cutler facility shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The Cutler facility shall, however, use all valid data collected during all other periods.
g. The Cutler facility shall monitor the catalyst inlet temperature and reduce this data to 4-hour rolling averages to demonstrate compliance with the limitations on the catalyst inlet temperature range.
h. For any month in which any applicable engine operated, the Cutler facility shall monitor the pressure drop across the respective catalyst once per month to demonstrate compliance with the operating limit established during the last performance test.

[40 C.F.R. §§ 63.6625, 63.6635, 63.6640(a) and Table 6(10)]

2. General Requirements

The Cutler facility shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to it at all times. The Cutler facility shall operate and maintain all applicable engines and associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the facility to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operations and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

3. Performance Tests

The Cutler facility is required to conduct subsequent performance tests on each of the units every 8,760 hours of operation or 3 years, whichever comes first. The

[14] A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Cutler facility shall conduct the tests in accordance with 40 C.F.R. § 63.6620 and Table 4 of the subpart.[15] [40 C.F.R. § 63.6620, Table 3(2) and Table 4(3)]

4. Notifications and Reports
   a. The Cutler facility shall report each instance when the requirements in Table 8 (General Provisions) of this subpart were not met. [40 C.F.R. § 63.6640 (e)]
   b. The Cutler facility shall submit all of the applicable notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) by the dates specified. [40 C.F.R. § 63.6645]
   c. Performance Tests
      The Cutler facility shall submit a Notification of Intent to conduct a performance test at least 60 days before each performance test is scheduled to begin. [40 C.F.R. § 63.7(b)(1) and 63.6645(g)]
   d. Semiannual Compliance Reports
      The Cutler facility shall submit Semiannual Compliance Reports according to § 63.6650 and Table 7 of the subpart. The Semiannual Compliance Reports may be submitted on the dates specified in Condition (27) of the Title V permit (with or as a part of the Semiannual Report), or according to § 63.6650(b)(1)-(4). [40 C.F.R. § 63.6650(b) and (f) and Table 7(1)]

      The compliance reports required under this subpart shall include the following information:
      (1) Organization name and address;
      (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
      (3) The date of report and beginning and ending dates of the reporting period;
      (4) If the facility had a malfunction during the reporting period, the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of the actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction;
      (5) If the facility did not have any deviations from any applicable emission or operating limitation, a statement that there were no deviations from the emission or operating limitations during the reporting period;
      (6) If there were no periods during which the CPMS was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period; and
      (7) For each deviation from an emission or operating limitation, the following information:

[15] Applicable notification dates are outlined in the "Notifications and Reports" part of this section.

- The date and time that each malfunction started and stopped;
- The date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;
- The date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8);
- A summary of the total duration of the deviation during the reporting period, and the total duration as the percent of the total source operating time during the reporting period;
- A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;
- A summary of the total duration of CPMS downtime during the reporting period, and the total duration of the CPMS downtime as a percent of the total operating time of the engine at which the CPMS downtime occurred during that reporting period;
- An identification of each parameter and pollutant (CO) that was monitored at the engine;
- A brief description of the applicable engine;
- A brief description of the applicable CPMS;
- The date of the latest CPMS certification or audit; and

A description of any changes in CMS, processes, or controls since the last reporting period.

[40 C.F.R § 63.6650(c) and (e)]

5. Recordkeeping

   The Cutler facility shall keep the following records:

   a. A copy of each notification and report that has been submitted to comply with this subpart, including all documentation supporting the Initial Notification and Notification of Compliance Status, according to the requirement in § 63.10(b)(2)(xiv);
   b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment;
   c. Records of performance tests and performance evaluations as required in §63.10(b)(2)(vii);
   d. Records of all required maintenance performed on the air pollution control and monitoring equipment;
   e. Records of action taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;
   f. For each CPMS:

(1) Records described in § 63.10(b)(2)(vi)-(xi),
(2) Previous versions of the performance evaluation plan as required in § 63.8(d)(3), and
(3) Requests for alternatives to the relative accuracy test for CPMS as required in § 63.8(f)(6)(i), if applicable;

g. Records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation;
h. Records of maintenance conducted on each engine in order to demonstrate that they, and their control devices, were operated and maintained according to the facility's maintenance plan.

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

(3) Fuel Sulfur Content Requirements

A. VLF-103-D#6 and VLF-100-B#15 are both licensed to fire distillate fuel with sulfur contents higher than 0.0015% by weight (0.05% and 0.5%, respectively). 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, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in VLF-103-D#6, VLF-100-B#15, and all distillate fuel-fired units at the Cutler Facility, shall not exceed 0.0015% by weight (15 ppm).

B. All licensed fuel limits that specify sulfur content shall remain in effect, replacing any given sulfur content with 0.0015% sulfur by weight.

[06-096 C.M.R. ch. 115, BPT]

Condition (1) of A-210-77-2-A, dated 04/04/2014, is hereby removed.

The following Condition replaces Condition (1) of A-210-77-1-A, dated 10/30/2014

(1) **Boilers VLF-103- B#7 and VLF-103-B#8; and Boiler VLF-100-B#15**

A. Fuel Use

1. Boilers VLF-103-B #7 and #8 [Boilers 1 & 2] shall only fire distillate fuel with a sulfur content not to exceed 0.0015% by weight. [A-210-77-1-A (12/29/2014), BACT]

2. Boiler VLF-100-B#15 shall only fire distillate fuel that meets the following fuel sulfur requirements:
   - All distillate fuel purchased or otherwise obtained prior to July 1, 2018, shall have a sulfur content not exceed 0.5% by weight.
   - All distillate fuel purchased or otherwise obtained after July 1, 2018, shall have a sulfur content not exceed 0.0015% by weight.

   [06-096 C.M.R. ch. 115, BPT and 38 M.R.S. § 603-A(2)(A)(3)]

3. The quantity of distillate fuel fired in VLF-103-B#7 and B#8 combined shall not exceed 254,040 gallons/year. [A-210-77-1-A (12/29/2014), BACT]

4. Compliance with the fuel sulfur content restrictions shall be demonstrated by fuel records from the supplier showing the date of purchase (or delivery), quantity, type, and the percent sulfur of the fuel delivered, as applicable. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

B. At any one time, Cutler may operate either Boiler VLF-103-B#7 or VLF-103-B#8 but not both, except during periods when one of the two is being taken off-line and the other is being brought on-line. The previous sentence notwithstanding, both boilers B#7 and B#8 are licensed to operate concurrently if none of the non-emergency generators VLF-103-D#2, VLF-103-D#3, VLF-103-D#4, and VLF-103-D#5 are in operation.

Operational records shall be maintained documenting compliance with this requirement. [A-210-77-1-A (12/29/2014), BACT]

C. Emissions from the boilers shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
VLF-103-B#7	PM	0.12	06-096 CMR 103(2)(B)(1)(a)
VLF-103-B#8			

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
VLF-103-B #7	0.48	0.48	0.48	0.006	0.58	0.15	0.01
VLF-103-B #8	0.48	0.48	0.48	0.006	0.58	0.15	0.01
VLF-100-B #15	0.04	0.04	0.04	0.04	0.004	0.38	0.09

D. Visible Emissions from each boiler shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [A-210-77-1-A, BACT, and 06-096 C.M.R. ch. 115, BACT]

E. NESHAP: 40 CFR Part 63, Subpart JJJJJJ Requirements

1. Boiler Tune-Up Program

   A boiler tune-up program shall be implemented in accordance with this Subpart, including the following requirements: [40 CFR § 63.11210(f))]

   a. For B#7, B#8, and B#15, a tune-up is required every five years. [40 CFR § 63.11223(a) and Table 2]

   b. For each tune-up, a tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. Each report shall contain the concentration of CO in the effluent stream (ppmv) and of oxygen (volume percent), measured at high fire or typical operating load, both **before** and **after** the boiler tune-up; a description of any corrective actions taken as part of the tune-up of the boiler; and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR § 63.11223(b)(6)]

      The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR § 63.11225(b)]

2. Boiler Tune-Up Requirements

   Boiler tune-ups, conducted to demonstrate continuous compliance, shall be performed as specified below:

   a. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 72 months from the previous inspection. [40 CFR § 63.11223(b)(1)]

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR § 63.11223(b)(2)]

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 72 months from the previous inspection. [40 CFR § 63.11223(b)(3)]

d. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR § 63.11223(b)(4)]

e. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmdv), and oxygen in volume percent, both **before** and **after** 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). Measurements may be taken using a portable CO analyzer. [40 CFR § 63.11223(b)(5)]

f. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR § 63.11223(b)(7)]

3. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJJ including the following:

a. Copies of notifications and reports with supporting compliance documentation;

b. Identification of each boiler, the date of tune-up, tune-up procedures followed, and the manufacturer's specifications to which the boiler was tuned;

c. Documentation of fuel type(s) used monthly by each boiler;

d. The occurrence and duration of each malfunction of the boiler;

e. Actions taken during periods of malfunction to minimize emissions and to restore the malfunctioning boiler to its usual manner of operation.

Records shall be in a form suitable and readily available for expeditious review. [40 CFR § 63.11225(c)]

The following Condition replaces Condition (3) of A-210-77-1-A, dated 10/30/2014

(3) **Non-Emergency Engines VLF-103-D#2, VLF-103-D#3, VLF-103-D#4, and VLF-103-D#5**

A. Fuel fired in the non-emergency engines VLF-103-D#2, VLF-103-D#3, VLF-103-D#4, and VLF-103-D#5 shall be ultra-low sulfur distillate fuel with a sulfur content not to exceed 0.0015% by weight. Compliance shall be demonstrated by suppler fuel records of quantities and sulfur content of each delivery.

B. Emissions from each unit VLF-103-D#2, VLF-103-D#3, VLF-103-D#4, and VLF-103-D#5 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.08	06-096 CMR 115, BACT	Federally Enforceable

Pollutant	Emission Limit	Emission Limit Basis
CO	70% reduction or 23 ppmvd @ 15% O_2	40 C.F.R. § 63.6603(a) and Table 2d(3)

Pollutant	lb/hour	Origin and Authority
PM	2.56	06-096 CMR 115, BACT
PM_{10}	2.56	
$PM_{2.5}$	2.56	
SO_2	0.05	
NO_x	102.4	A-210-70-B-A (3/18/2004), BACT/BPT
CO	19.04	06-096 CMR 115, BPT
VOC	3.2	A-210-70-B-A (3/18/2004) and A-210-70-D-R (6/19/2012), BACT/BPT

C. Visible emissions from each of the stacks serving VLF-103-D#2, VLF-103-D#3, VLF-103-D#4, and VLF-103-D#5 shall not exceed 20% opacity on a six-minute block average basis, except for two six-minute block averages in a three-hour period. [A-210-70-D-I (6/19/2012), BPT]

D. At any one time, Cutler shall operate only one of the Units VLF-103-D#2, VLF-103-D#3, VLF-103-D#4, or VLF-103-D#5 but not two or more concurrently, except during periods when one of the units is being brought off-line and another is being brought on-line. Operational records shall be maintained documenting compliance with this requirement.

The above limitation notwithstanding, Cutler may operate more than one of these units concurrently for short periods of time for emergency purposes (i.e., de-icing), testing, maintenance, equipment upgrades, and training; but such concurrent operation shall not exceed 100 hours per year. Cutler shall document the reason for concurrent operation and the total number of hours that two or more units are operating concurrently in this emergency mode and make these records available upon request. [06-096 CMR 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 20 DAY OF September, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PAUL MERCER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 04/01/2016
Date of application acceptance: 04/08/2016

Date filed with the Board of Environmental Protection:

Filed
SEP 21 2018
State of Maine
Board of Environmental Protection

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