



DEPARTMENT ORDER

**ReEnergy Stratton LLC  
Franklin County  
Stratton, Maine  
A-368-70-N-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	ReEnergy Stratton LLC
LICENSE TYPE	Part 70 Significant License Modification
NAICS CODES	221119
NATURE OF BUSINESS	Biomass Electrical Generation Facility
FACILITY LOCATION	27 Fox Farm Rd, Stratton, Maine

ReEnergy Stratton LLC (RES) is a biomass-fired electrical generation facility capable of generating up to approximately 50 megawatts (gross) of electricity. The plant consists of one steam generating unit (Boiler #1) which fires primarily sawmill residues, whole tree chips, and other wood fuels. Fuel oil is used during startups, shutdowns, flame stabilization, and emergency situations only. Boiler #1 supplies steam to a steam turbine for the generation of electricity.

RES has the potential to emit more than 100 tons per year (tpy) of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), 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

When not firing construction and demolition wood, RES does not have the potential to emit 10 tpy or more of a single hazardous air pollutant (HAP) or 25 tpy or more of combined HAP and is classified as an area source for HAP.

**B. Emission Equipment**

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

**Boiler**

Equipment	Max. Heat Input Capacity (MMBtu/hr)		Maximum Firing Rate	Dates of...	Stack #
Boiler #1	672.0	Biomass	74.7 ton/hr	Manufacture: 1988	01
	140.0	Distillate fuel	1,000 gal/hr	Installation: 1989	

**Engines**

Equipment	Max. Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output	Fuel Type, % sulfur	Mfr. Date	Install. Date	Stack #
Diesel Unit 1 (Generator)	3.33	23.8	341.3kW (475 hp)	Distillate fuel, 0.0015% by weight	2/1992	1993	002
Diesel Unit 2 (Fire Pump)	1.37	9.8	196 hp (140 kW)		6/1988	1989	003
Propane Unit 1 (Generator)	0.78	8.5	80 kW (112 hp)	Propane	1988		

RES 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 Measure**

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
CDW	Construction and Demolition Wood
CEMS	Continuous Emissions Monitoring System
CMS	Continuous Monitoring System
CO	Carbon Monoxide
CO <sub>2e</sub>	Carbon Dioxide equivalent
COMS	Continuous Opacity Monitoring System

CPMS	Continuous Parameter Monitoring System
EPA or US EPA	United States Environmental Protection Agency
ESP	Electrostatic Precipitator
gal/hr	gallon per hour
GHG	Greenhouse Gases
gr/dscf	grains per dry standard cubic feet
HAP	Hazardous Air Pollutants
HCl	Hydrogen Chloride or Hydrochloric Acid
Hg	Mercury
lb	pound
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
lb/ton	pounds per ton
M.R.S.	Maine Revised Statutes
MMBtu	Million British Thermal Units
MMBtu/hr	million British Thermal Units per hour
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
O <sub>2</sub>	Oxygen
PM	Particulate Matter less than 100 microns in diameter
PM <sub>10</sub>	Particulate Matter less than 10 microns in diameter
PM <sub>2.5</sub>	Particulate Matter less than 2.5 microns in diameter
ppmdv	parts per million on a dry volume basis
PSD	Prevention of Significant Deterioration
PTE	Potential To Emit
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine
R-SCR	Regenerative Selective Catalytic Reduction
SO <sub>2</sub>	Sulfur Dioxide
THC	Total Hydrocarbon
tpy	ton per year
VOC	Volatile Organic Compounds
µg/m <sup>3</sup>	micrograms per cubic meter

#### D. Definitions

24-hr block means midnight to midnight. A 24-hr block average is considered valid if it contains at least 18 valid hourly averages as defined in 06-096 C.M.R. ch. 117, § 3(C)(2)(2)(b)(v).

Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue; wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.*, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition also includes wood chips and processed pellets made from wood or other forest residues. Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. RES should consult with the Department before adding any new biomass type to its fuel mix.

Construction and Demolition Wood (CDW) means a non-hazardous secondary material produced and obtained in accordance with 40 C.F.R. § 241.4(a)(5).

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.

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.

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

engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

#### **E. Application Classification**

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

The application for RES does not include the licensing of increased emissions or the installation of new or modified equipment; therefore, the license is considered to be 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 Classification**

##### 1. Criteria Pollutants

RES has the potential to emit more than 100 tons per year (tpy) of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and carbon monoxide (CO). RES also has the potential to emit more than 50 tpy of volatile organic compounds (VOC). Therefore, the source is classified as a major source for criteria pollutants.

##### 2. Hazardous Air Pollutants When Firing CDW

Based on stack testing performed in July 2006 at the Stratton facility, it is not expected that this facility can be considered an area source of hazardous air pollutants (HAP) while firing construction and demolition wood (CDW) without imposing additional enforceable operational restrictions. In particular, emissions of hydrogen chloride (HCl) were determined to be significantly higher when firing CDW, causing the facility to have a potential to emit (PTE) of HCl greater than 10 tpy. Therefore, when firing CDW, RES is considered a major source of HAP.

##### 3. Hazardous Air Pollutants When Not Firing CDW

When not firing CDW, the facility's fuel mix consists of only biomass (as defined by this license), primarily green whole tree chips. In June 2007, stack testing was conducted at ReEnergy's Ashland facility which had a boiler of similar size and configuration as RES and which fired biomass sourced from similar areas. Testing was performed for acetaldehyde, acrolein, formaldehyde, hydrogen chloride, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium. Results were used to estimate HAP emissions at RES. For HAPs where no stack test data was available, emission factors for green wood combustion obtained from the National Council for Air and Stream Improvement, Inc. (NCASI) Technical Bulletin 1013 were applied. In the case of polycyclic organic matter (POM), emission

factors were not available from NCASI and were instead sourced from an Eastern Research Group, Inc. (ERG) memo dated October 2002.

Based on this methodology, PTE for HAP from RES when firing biomass which does not include CDW is less than 10 tpy of any single HAP and less than 25 tpy for all HAP combined. The highest single HAP is estimated to be benzene with a PTE of 2.88 tpy. The PTE for all HAP combined is estimated to be less than 15 tpy. Therefore, when not firing CDW, RES is considered to be an area source of HAP without additional operating restrictions.

### G. Facility Description

RES operates a wood/biomass-fired electric generating facility. Boiler #1 fires sawmill residues, whole tree chips, and other wood fuels; fuel oil is used during startups and shutdowns, for flame stabilization, and for emergency situations. The wood-fired boiler supplies steam to a turbine, which generates 20-50 megawatts (gross) of electricity. The facility is controlled by a system of local instrumentation and a central programmable controller, which is configured to allow plant operation down to 50% of the maximum net electrical output.

Biomass fuels (wood chips) are trucked to the facility daily. Each truck is weighed and then unloaded via one of two back-in tilt dumpers. The fuel is stacked on to a high-density polyethylene (HDPE)-lined fuel storage yard. The fuel is then conveyed to a disc screen for size classifying and then made smaller using an in-line wood hog, if required. The sized fuel is then conveyed to the boiler as needed.

The generating plant consists of one travelling-grate membrane water-wall boiler capable of producing 500,000 pounds of steam per hour, one condensing steam turbine generator, one condenser, four feedwater heaters, one cooling tower, one electrostatic precipitator (ESP), an electrical distribution system, and instrumentation and control systems.

Superheated steam from the boiler is routed to the steam turbine generator, which is supplied with five extractions to supply steam for de-aeration, condensate, and feedwater heating. Exhaust steam from the turbine is condensed in the surface condenser, and the resulting condensate is pressurized, heated, deaerated, and routed back to the boiler for reuse. The circulating water leaving the condenser is cooled in a two-cell cooling tower before being pumped back for reuse in the condenser.

Hot flue gas from the steam generator is used in a tube preheater to heat combustion air prior to its introduction into the furnace. Pre-heated combustion air is divided into under-grate air, which is evenly distributed through the active grate area to begin the combustion process, and overfire air jets which provide mixing of fuel and air to complete the combustion process. After leaving the preheater, the exhausting flue gas is routed to a mechanical dust collector followed by a four-cell ESP for control of particulate matter. The resulting cleaned flue gas is then discharged to the atmosphere through the stack.

**H. General Facility Requirements**

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

<b>Citation</b>	<b>Requirement Title</b>
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. 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
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
40 C.F.R. Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
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 JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
40 C.F.R. Part 70	State Operating Permit Programs
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 existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

### B. NO<sub>x</sub> RACT (Reasonably Available Control Technology)

*Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides*, 06-096 C.M.R. ch. 138 (NO<sub>x</sub> RACT) is applicable to sources that have the potential to emit quantities of NO<sub>x</sub> equal to or greater than 100 tpy. Amendment A-368-71-F-M, issued to the facility on 2/17/1995, addressed NO<sub>x</sub> RACT requirements. Boiler #1 was determined to be meeting NO<sub>x</sub> RACT by complying with a NO<sub>x</sub> emission limit of 0.30 lb/MMBtu on a 24-hour daily block average. The NO<sub>x</sub> RACT requirements are incorporated in this renewal.

### C. VOC RACT (Reasonably Available Control Technology)

*Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds*, 06-096 C.M.R. ch. 134 (VOC RACT) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tpy from non-exempt equipment. RES is exempt from VOC RACT requirements because the facility does not have the potential to emit more than 40 tpy of VOC from non-exempt equipment and processes. Boiler #1 and the engines are exempt from VOC RACT requirements because VOC emissions from these units are due to incomplete combustion.

[06-096 C.M.R. ch. 134, § 1(C)(4)]



#### D. 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 which falls into any one of the following three categories, per *General Provisions, Who must report?*, 40 C.F.R. § 98.2.

- (a)(1) A facility that contains any source category that is listed in Table A–3 of this subpart in any calendar year starting in 2010.
- (a)(2) A facility that contains any source category that is listed in Table A–4 of this subpart and that emits 25,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all applicable source categories that are listed in Table A–3 and Table A–4 of this subpart
- (a)(3) A facility that in any calendar year starting in 2010 meets all three of the conditions listed in this paragraph (a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources only.
  - (i) The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this section.
  - (ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hour or greater.
  - (iii) The facility emits 25,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from all stationary fuel combustion sources.

If RES exceeds the use of 2,430,556 gallons<sup>1</sup> of distillate fuel and waste oil in a calendar year, the facility will meet all three conditions listed in paragraph (a)(3) above and will be subject to the recordkeeping and reporting requirements of 40 C.F.R. Part 98.

This facility shall fulfill the applicable recordkeeping and reporting requirements of 40 C.F.R. Part 98.

#### E. 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 tons/year for VOC and 100 tpy for any other 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

---

<sup>1</sup> Based on a CO<sub>2</sub>e of 22,680 lb/1,000 gallons distillate oil and waste oil. This total includes Boiler #1 and all stationary engines.

or NESHAP regulation proposed by the Administrator after November 15, 1990.  
[40 C.F.R. Part 64 § 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**

Units	Eligible Pollutant	CAM Required	Reason CAM is Not Applicable	Regulatory Authority
Boiler #1	PM/PM <sub>10</sub>	No	Subject to emissions limits in NSPS 40 C.F.R. Part 60, Subpart Db proposed after November 15, 1990	40 C.F.R. § 64.2(b)(1)(i)
	NO <sub>x</sub>	No	Operating a NO <sub>x</sub> CEMS	40 C.F.R. § 64.2(b)(1)(vi)

Therefore, there are no units at this facility subject to CAM requirements.

#### F. Fuel Sulfur Content Requirements

RES 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).

#### G. Boiler #1

Boiler #1 is a Combustion Engineering model VU-40 boiler manufactured in 1988 and installed in 1989. A Mitsubishi steam turbine coupled to a Brush generator uses produced steam to generate approximately 20-50 gross megawatts of electrical power.

Boiler #1 was designed with a heat input capacity of 672.0 MMBtu/hr while firing biomass. A steam production limit of 500,000 pounds per hour on an 8-hr average basis is used to demonstrate Boiler #1 does not exceed this maximum heat input. The boiler has an auxiliary burner capable of firing distillate fuel at a design heat input capacity of 140.0 MMBtu/hr. Fuel oil is used for start-ups, shutdowns, flame stabilization, and emergency situations. Specification and off-specification waste oil generated on-site is also utilized as fuel in Boiler #1.

Fuel is fed through the spreader-stoker system into the furnace portion of the boiler via six variable speed screw feeders and distributed on the traveling grate via high pressure transport air and trajectory plates. Heavier fuel is spread evenly on the grate surface where it is combusted, while lighter fuel is burned in suspension. Boiler #1 is equipped with an oxygen trim system which maintains an optimum air-to-fuel ratio. In addition to the under-

grate and overfire air system, an Ecotube system (advanced overfire air system) is also installed and can be operated if additional overfire air is required.

Emissions exit through Stack #1, which has an above ground level height of 290 feet.

**1. Distillate Fuel and Waste Oil**

RES is licensed to burn distillate fuel with a sulfur content not to exceed 0.0015% sulfur by weight in Boiler #1. RES is also licensed to burn specification waste oil in Boiler #1.

The waste oil is generated from on-site maintenance activities. RES shall not bring in off-site waste oil to be combusted. The amount of specification waste oil fired in Boiler #1 shall not exceed 5,000 gallons per year and shall be included in the annual fuel oil limit.

RES is limited to firing 4,204,800 gallons per year of fuel oil (distillate fuel and waste oil combined) on a 12-month rolling total basis in Boiler #1 and the Regenerative Selective Catalytic Reduction (R-SCR) combined. This limit restricts RES to an annual capacity factor of less than 10% for oil. This limit is considered Federally-enforceable as it exempts Boiler #1 from certain requirements in 40 C.F.R. Part 60, Subpart Db for SO<sub>2</sub> [§ 60.42b(d)] and NO<sub>x</sub> [§ 60.44b(c)].

The combined fuel oil use of Boiler #1 and the R-SCR is also limited to no more than 3,000 gallons on a 3-hour block total and 24,000 gallons per day. The most recent ambient air quality analysis was performed prior to the installation of the R-SCR system. Therefore, these limits are required to ensure fuel oil firing does not exceed the levels represented in this analysis.

Emissions from oil combustion are included in the emission limits for combustion of biomass.

**2. Waste Fiber**

RES was previously licensed to fire up to 138,583 tons per year of waste fiber. This material was produced at the Cascade Auburn Fiber Inc (Cascade) facility in Auburn, Maine. However, Cascade no longer produces this fiber. As such, conditions related to the firing of waste fiber are obsolete and have been removed from the license.

**3. Clarifier Waste Cake**

RES has an on-site wastewater treatment facility. RES incorporates the clarifier waste cake from the filter press into the fuel pile. RES shall limit the quantity of clarifier waste cake burned in Boiler #1 to 100 tpy on a 12-month rolling total basis. Compliance

shall be demonstrated by records of the quantity of waste cake incorporated into the fuel pile.

4. Construction and Demolition Wood (CDW)

a. History and Applicable Federal Requirements

RES was originally licensed to fire CDW in Boiler #1 in July 2002 (A-368-70-B-M, 7/3/2002). In June 2013, RES ceased accepting CDW as a fuel for Boiler #1. This allowed RES to be classified as an area source of HAP prior to the applicability date of January 31, 2016, for existing boilers in *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. RES was instead considered to be subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ.

On February 27, 2017, RES resumed firing CDW as part of their fuel mix in Boiler #1. This change in fuel mix is assumed to have increased the facility's PTE for HAP to major source levels. Therefore, per 40 C.F.R. § 63.7495(c)(2), RES had three years to come into compliance with Subpart DDDDD.

RES once again ceased combustion of CDW by December 31, 2019, and returned to being considered an area HAP source subject to Subpart JJJJJ rather than Subpart DDDDD. The precedent for this change is based on a memo titled *Reclassification of Major Sources as Area Source Under Section 112 of the Clean Air Act* authored by William L. Wehrum, EPA Assistant Administrator dated January 25, 2018. The memo states, "a source that was previously classified as major, and which also limits its PTE, will no longer be subject either to the major source MACT or other major source requirements that were applicable to it as a major source under CAA section 112."

Thus, RES requested, and was granted, a federally enforceable restriction against firing CDW in Boiler #1 as an area source of HAP. However, RES wished to retain the option to resume firing of CDW and return to major HAP source status. RES understands that, under current EPA policy, Boiler #1 must be in compliance with Subpart DDDDD immediately upon resumption of combustion of CDW. Since the facility is currently subject to 40 C.F.R. Part 63, Subpart JJJJJ, those are the applicable requirements which have been included in this license.

b. Obsolete State Requirements

Condition (49) of air emission license A-368-70-H-A (4/5/2006) requires RES to conduct stack tests for numerous metals, hydrogen chloride, and dioxin at various frequencies depending on the percentage of CDW in the fuel mix. As explained above, RES is presumed to be a major HAP source when combusting CDW. The

testing requirements of this State Condition are duplicative of 40 C.F.R. Part 63, Subpart DDDDD. Therefore, this Condition is considered obsolete and no longer applicable.

Similarly, Condition (42) of air emission license A-368-70-B-M (7/3/2002) requires RES to sample and report on the plastics content of the CDW and perform analysis of the fuel and fly/bottom ash. These requirements are duplicative of the requirements of other Department programs and are therefore considered obsolete and no longer applicable.

#### 5. Processed Pallets

Boiler #1 may also fire chipped wood pallets. [06-096 C.M.R. ch. 140, BPT (A-368-70-C-A, 1/20/2004)] *Solid Wastes Used as Fuels or Ingredients in Combustion Units*, 40 C.F.R. Part 241 includes untreated wood pallets in the definition of “clean cellulosic biomass.” This regulation’s definition of “traditional fuels” includes clean cellulosic biomass. Therefore, untreated wood pallets are considered a traditional fuel and not a solid waste and are not considered CDW. The pallets burned in Boiler #1 are not to be coated, painted, or treated in any way, and all fasteners must be removed prior to combustion. Failure to remove fasteners from the pallets may make the use of this fuel subject to *Solid Waste Management Rules: Beneficial use of Solid Wastes*, 06-096 C.M.R. ch. 418.

#### 6. Control Equipment

##### a. PM Control Methods

RES controls emissions of particulate matter from Boiler #1 by use of a multiple cyclone separator (multicyclone) followed by a four-field electrostatic precipitator (ESP).

While burning fuel containing CDW, with the exception of startup, shutdown, and malfunction, RES shall operate the ESP with all fields energized. If a malfunction should result in loss of an ESP field or chamber at any time while combusting CDW, RES must take immediate action to correct the failed field or chamber and return it to service within 72 hours unless provisions to combust only non-CDW fuels have been executed within this time.

With the exception of during startup, RES shall operate, at a minimum, the number of ESP fields that operated during the most recent stack test demonstrating compliance with the licensed PM emission limits. Upon written notification to the Department, and in accordance with the *Bureau of Air Quality’s Performance Testing Guidance*, RES may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no

circumstances shall RES be relieved of its obligation to meet its licensed emission limits.

For the ESP, RES shall monitor continuously and record once per day the following:

- (1) Primary and secondary voltages on each field; and
- (2) Primary and secondary current on each field.

RES shall maintain a log (written or electronic) of all maintenance performed on the multiclone and ESP as well as a log documenting malfunctions and corrective actions taken.

b. NO<sub>x</sub> Control Methods

Add-on NO<sub>x</sub> controls consist of an ECOTUBE system manufactured by ECOMB SA from Sweden and a regenerative selective catalytic reduction (R-SCR) system designed by Babcock Power Environmental Inc.

Note: The ECOTUBE and R-SCR systems were added to RES's license through a Part 70 Minor Modification (A-368-70-E-A, 1/4/2005). Therefore, the emission limits and control requirements set by A-368-70-E-A are considered enforceable by the State only unless they have been streamlined with another Federally enforceable condition.

The ECOTUBE system consists of two liquid cooled, automatically retractable opposing tubes (ECOTUBEs) installed in a specific location in the upper furnace area of the boiler. Ambient air and/or urea reagent can be introduced into the boiler through the ECOTUBEs at high pressure through strategically located nozzles, resulting in a potential increase in combustion efficiency and a reduction in overall criteria pollutant emissions, as well as an increase in thermal efficiency and associated reduction in fuel consumption.

The R-SCR system removes NO<sub>x</sub> from the flue gas using a catalytic reduction process with a 19% aqueous ammonia reagent added to the flue gas upstream of the catalyst. Because the flue gases exiting the stack are typically 300 – 350 °F, possibly below the temperature required for optimal function of the catalyst, flue gases entering the R-SCR system may need to be heated for optimal performance. Flue gases are heated using auxiliary burners, if needed, firing a maximum of 85 gallons per hour of distillate fuel. These burners are located after the ESP and before the catalyst. The aqueous ammonia is added upstream of the catalyst and well mixed with the flue gas prior to the catalyst to ensure optimum NO<sub>x</sub> removal efficiency and to minimize the amount of unreacted ammonia in the outlet gas stream.

Although beneficial for reducing NO<sub>x</sub>, use of these systems can involve emissions of ammonia (NH<sub>3</sub>), i.e., NH<sub>3</sub> slip. The following requirements are intended to minimize NH<sub>3</sub> slip.

- (1) When the R-SCR system is to be operated, ammonia shall not be injected into the R-SCR system during startup or shutdown unless the catalyst bed is at or above the manufacturer's specified minimum operation temperature.
- (2) Urea or aqueous ammonia will not be injected into Boiler #1 using the ECOTUBE system until the boiler is at normal operating temperature.

RES installed both the R-SCR and the ECOTUBE systems primarily for the purpose of optimizing emissions of NO<sub>x</sub>, allowing RES an opportunity to participate as a qualifying renewable energy provider in New England's renewable energy markets.

RES is not required to operate either the R-SCR or the ECOTUBE system provided Boiler #1 does not exceed the 0.24 lb/MMBtu NO<sub>x</sub> emission limit established in air emission license A-368-70-E-A (1/4/2005). Whenever either the R-SCR or the ECOTUBE system are in use, RES shall maintain records of urea/aqueous ammonia injection operations, including dates urea/aqueous ammonia injection is utilized and amounts of urea reagent used on a daily, monthly, and 12-month rolling total basis.

While in use, RES shall maintain a system of inspection and maintenance (I&M) for the R-SCR and ECOTUBE systems. At a minimum, the I&M program will include periodic inspection of the systems to ensure their integrity and proper function. RES shall document compliance by means of an inspection and maintenance log (written or electronic) in which RES shall record all inspection dates and findings as well as routine and non-routine maintenance required to ensure proper operation.

7. *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101

Boiler #1 is exempt from the requirements of *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 because it is subject to visible emission standards under 40 C.F.R. Part 60, Subpart Db. [06-096 C.M.R. ch. 101, §§ 1(C)(7)]

8. *NO<sub>x</sub> Control Program*, 06-096 C.M.R. ch. 145

Boiler #1 is not subject to *NO<sub>x</sub> Control Program*, 06-096 C.M.R. ch. 145. This rule applies to fossil fuel-fired units with a maximum heat input greater than 250 MMBtu/hr located in counties not covered by a waiver of NO<sub>x</sub> control requirements pursuant to Section 182(f) of the 1990 Clean Air Act. In 06-096 C.M.R. ch. 145, "fossil fuel-fired" is defined as "the combustion of fossil fuel or, if in combination with any other fuel,

fossil fuel comprises 51% or greater of the annual (calendar year basis) heat input on a Btu basis.”

Although Boiler #1 fires fossil fuel, it makes up less than 51% of the boiler’s heat input on an annual basis. Boiler #1 is already subject to a Federally-enforceable limit which restricts the firing of fuel oil to an annual capacity factor of 10%.

9. New Source Performance Standards (NSPS)

Boiler #1 is subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Db. These standards apply to steam generating units with a heat input capacity of 100 MMBtu/hr or more that are constructed after June 9, 1984.

a. Standards

The following standards apply to Boiler #1.

(1) Particulate Matter

Boiler #1 shall not exceed an emission limit for PM of 0.10 lb/MMBtu. This standard applies at all times, except during periods of startup, shutdown, or malfunction. [40 C.F.R. §§ 60.43b(c)(1) and (g)]

(2) Opacity

Visible emissions from Boiler #1 shall not exceed 20% opacity on a 6-minute block average, except for one 6-minute block average per hour of not more than 27% opacity. This standard applies at all times, except during periods of startup, shutdown, or malfunction. [40 C.F.R. §§ 60.43b(f) and (g)]

(3) Sulfur Dioxide (SO<sub>2</sub>)

Boiler #1 shall not exceed an emission limit for SO<sub>2</sub> of 0.20 lb/MMBtu. This standard applies at all times. [40 C.F.R. § 60.42b(a) and § 60.45b(a)]

(4) Nitrogen Oxides (NO<sub>x</sub>)

Since Boiler #1 is limited to an annual capacity factor of 10% for distillate fuel, there are no applicable emission standards in Subpart Db for NO<sub>x</sub>. [40 C.F.R. § 60.44b(d)]



b. Monitoring Requirements

- (1) RES shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) on Boiler #1 and record the output of the system. [40 C.F.R. § 60.48b(a)]
- (2) The span value for the COMS shall be between 60 – 80%. [40 C.F.R. § 60.48b(e)(1)]
- (3) Since Boiler #1 only combusts wood and distillate oil, RES is not required to install an SO<sub>2</sub> CEMS. [40 C.F.R. § 60.47b(f)]

c. Recordkeeping

RES shall maintain records in accordance with 40 C.F.R. Part 60, Subpart Db including, but not limited to, the following:

- (1) The amounts of each fuel combusted during each day. [40 C.F.R. § 60.49b(d)(1)]
- (2) Calculations documenting the annual capacity factor individually for distillate fuel and wood on a 12-month rolling average basis. [40 C.F.R. § 60.49b(d)(1)]
- (3) Records of COMS data and calculated averages. [40 C.F.R. § 60.49b(f)]
- (4) Fuel receipts from the supplier that certify that the oil meets the definition of distillate fuel. [40 C.F.R. § 60.49b(r)]

d. Reports

RES shall prepare and submit to the Department and EPA the following reports every six months. All reports shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period. [40 C.F.R. § 60.49b(w)]

- (1) Excess emissions report. Excess emissions are defined as all 6-minute periods during which the average opacity exceeds the standard. [40 C.F.R. § 60.49b(h)]
- (2) Reports certifying that only very low sulfur oil (i.e., distillate fuel) and other fuels that are known to contain insignificant amounts of sulfur (i.e., wood) were combusted in Boiler #1 during the reporting period. [40 C.F.R. § 60.49b(r)]

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

As described earlier, RES is considered an area source of HAP provided Boiler #1 does not combust CDW. Therefore, Boiler #1 is considered 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 as long as RES does not resume combustion of CDW.

Boiler #1 is subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. It is considered an existing biomass boiler.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Boiler Tune-Up Program

- (i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]
- (ii) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
Existing biomass boiler with oxygen trim system which maintains an optimum air-to-fuel ratio (Boiler #1)	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

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

1. 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 for up to 72 months from the previous inspection for boilers with oxygen trim systems. [40 C.F.R. § 63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
3. 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 for up to 72 months from the previous inspection for boilers with oxygen trim systems. [40 C.F.R. § 63.11223(b)(3)]

4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, 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 C.F.R. § 63.11223(b)(5)]
6. 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 C.F.R. § 63.11223(b)(7)]

(iv) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:

1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
2. A description of any corrective actions taken as part of the tune-up of the boiler; and
3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

(v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)] RES submitted their Notification of Compliance Status to EPA on June 28, 2012.

(2) Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;

(iv) The following certifications, as applicable:

1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
2. "No secondary materials that are solid waste were combusted in any affected unit."
3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(3) Energy Assessment

A one-time energy assessment was required to be performed on Boiler #1 by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 C.F.R. § 63.11196(a)(3)] RES's one-time energy assessment was completed on January 30, 2014.

b. Recordkeeping

- (1) Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:
  - (i) Copies of notifications and reports with supporting compliance documentation;
  - (ii) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
  - (iii) Records of the occurrence and duration of each malfunction of each applicable boiler; and
  - (iv) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- (2) Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

11. Emission Limits and Streamlining

For Boiler #1, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (\* denotes a request for streamlining), and the applicable emission limits can be found below. Unless otherwise stated, limits are on a 1-hour block average basis and apply at all operating times.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.06 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(4)(c)	0.030 lb/MMBtu *
	0.030 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	
	0.10 lb/MMBtu	40 C.F.R. Part 60, Subpart Db, § 60.43b(c)(1)	
	20.8 lb/hr	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	20.2 lb/hr *
	20.2 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	
PM <sub>10</sub>	20.2 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	20.2 lb/hr <b>Enforceable by State-only</b>
SO <sub>2</sub>	0.20 lb/MMBtu	40 C.F.R. Part 60, Subpart Db, § 60.45b(a)	0.20 lb/MMBtu
	140.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	35.5 lb/hr *
	35.5 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	
NO <sub>x</sub>	0.30 lb/MMBtu (24-hr block avg)	06-096 C.M.R. ch. 138, § (3)(B)(3)	0.30 lb/MMBtu (24-hr block avg)
	0.24 lb/MMBtu (24-hr block avg) (See Note 1)	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	0.24 lb/MMBtu (24-hr block avg) (See Note 1) <b>Enforceable by State-only</b>
	235.2 lb/hr	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	161.3 lb/hr *
	161.3 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
CO	0.60 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	0.60 lb/MMBtu * (24-hr block avg)
	0.60 lb/MMBtu (24-hr block avg)	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	
	403.2 lb/hr	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	403.2 lb/hr
VOC	0.070 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	0.070 lb/MMBtu
	47.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	47.0 lb/hr
Lead	0.08 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	0.08 lb/hr <b>Enforceable by State-only</b>
NH <sub>3</sub>	20 ppmdv @ 12% CO <sub>2</sub> (24-hr block avg)	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	20 ppmdv @ 12% CO <sub>2</sub> * (1-hr block avg) <b>Enforceable by State-only</b>
	20 ppmdv @ 12% CO <sub>2</sub> (1-hr block avg)	06-096 C.M.R. ch. 140, BPT <b>Enforceable by State-only</b>	
	9.04 lb/hr (24-hr block avg.)	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005) <b>Enforceable by State-only</b>	9.04 lb/hr * (1-hr block avg.) <b>Enforceable by State-only</b>
	9.04 lb/hr (1-hr block avg.)	06-096 C.M.R. ch. 140, BPT <b>Enforceable by State-only</b>	
Visible Emissions	20% opacity on a 6-minute block average basis, except for one (1) 6-minute period per hour of not more than 27% opacity (See Note 2)	40 C.F.R. Part 60, Subpart Db, § 60.43b(f)	20% opacity on a 6-minute block average basis, except for one (1) 6-minute period per hour of not more than 27% opacity (See Note 2)

Note 1: Applies at all operating times except during startup and low load conditions of less than 30 MW net generation.

Note 2: This standard applies at all times, except during periods of startup, shutdown, or malfunction.

## 12. O<sub>2</sub> Spikes

Exhaust gases during periods of startup, shutdown, and malfunction can have frequent periods with very high O<sub>2</sub> readings (O<sub>2</sub> spikes) which make emissions calculations from CEMS data inappropriate. Data from periods of high O<sub>2</sub> (greater than 16%) in the stack gas compromises the CEMS' ability to appropriately account for CO and NO<sub>x</sub> lb/MMBtu emission rates from measured ppm emission rates.

Accordingly, the Department has determined that data obtained during periods of startup, shutdown, or malfunction where O<sub>2</sub> levels exceed 16% may be excluded in calculations used to determine compliance with the CO and NO<sub>x</sub> lb/MMBtu emission limit, provided that operating records are available to demonstrate that the facility was being operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

### 13. Startup/Shutdown

RES is required to operate Boiler #1 such that the visible emissions from the boiler do not exceed 20% opacity on a 6-minute block average basis, except for one 6-minute block average per hour of not more than 27% opacity except for periods of startup, shutdown, or malfunction per 40 C.F.R. §§ 60.43b(f) and (g).

#### a. Definitions

For the purposes of complying with the visible emission standards in this license, *startup* is defined as a period which begins when any fuel is fired in the boiler after a shutdown and ends no later than 4 hours after power generation commences (i.e., 4 hours after generator breaker-closed). Startup may also end by removal of fire from the boiler.

For the purposes of this license, *shutdown* is defined as a period which begins when power generation ceases and ends when fuel is no longer being combusted in the boiler.

*Malfunction* is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 C.F.R. § 60.2]

RES shall keep records sufficient to document any startup, shutdown, or malfunction time periods.

b. Work Practice Standards

During periods of startup and shutdown, RES shall operate Boiler #1 in accordance with the work practice standards listed below.

- (1) RES shall adhere to the manufacturer's suggested standard operating procedures for startup and shutdown.
- (2) Boiler #1 shall not fire CDW during startup until all ESP fields are energized. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

14. Emission Limit Compliance Methods

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

- a. RES shall demonstrate compliance with the PM lb/MMBtu and lb/hr emission limits through performance testing conducted at least once every five calendar years. The next compliance test is due no later than 12/31/2024. [06-096 C.M.R. ch. 115, BACT (A-368-71-G-M, 6/12/1996) and 38 M.R.S. § 589.2]
- b. RES shall demonstrate compliance with the SO<sub>2</sub> lb/MMBtu emission limit through the recordkeeping requirements of this license. [40 C.F.R. §§ 60.49b(d)(1) and (r)]
- c. RES shall demonstrate compliance with the NO<sub>x</sub> lb/MMBtu emission limits through use of a NO<sub>x</sub> CEMS. [06-096 C.M.R. ch. 117 § 1(B)(2) and 06-096 C.M.R. ch. 138, § 3(B)(6)]
- d. RES shall demonstrate compliance with the CO lb/MMBtu emission limit through use of a CO CEMS. [06-096 C.M.R. ch.115, BACT (A-368-71-A-N, 3/10/1987)]
- e. RES shall demonstrate compliance with the NH<sub>3</sub> ppm<sub>dv</sub> and lb/hr emission limits through performance testing conducted at least once every two calendar years. The next compliance test is due no later than 12/31/2020. [06-096 C.M.R. ch. 115, BACT (A-368-70-E-A, 1/4/2005)]
- f. RES shall demonstrate compliance with the visible emission limits through the use of a COMS. [40 C.F.R. § 60.48b(a)]
- g. Upon request by the Department, RES shall conduct performance testing to demonstrate compliance with the VOC lb/MMBtu emission limits using test methods approved by the Department. [40 C.F.R. § 70.6(c)(1)]



- h. Upon request by the Department, RES shall conduct performance testing to demonstrate compliance with the PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC lb/hr emission limits using test methods approved by the Department. [40 C.F.R. § 70.6(c)(1)]

#### 15. Compliance Assurance Monitoring

CAM is not applicable to Boiler #1.

#### 16. Periodic Monitoring

RES shall record data and maintain records for the following monitoring values for Boiler #1.

- a. Hours of operation for Boiler #1 on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- b. Amounts of each fuel combusted during each day and on a monthly basis. [40 C.F.R. § 60.49b(d)(1) and 06-096 C.M.R. ch. 137]
- c. Amount of fuel oil (distillate fuel and specification waste oil combined) fired in Boiler #1 and R-SCR combined on a 12-month rolling total basis. [40 C.F.R. § 70.6(c)(1)]
- d. Amount of fuel oil (distillate fuel and specification waste oil combined) fired in Boiler #1 and R-SCR combined on a 3-hour block and daily block total basis. [40 C.F.R. § 70.6(c)(1)]
- e. Amount of specification waste oil fired on a 12-month rolling total basis. [40 C.F.R. § 70.6(c)(1)]
- f. Steam flow rate and steam temperature monitored continuously to document compliance with the steam production limit. [40 C.F.R. § 70.6(c)(1)]
- g. Amount of clarifier waste cake incorporated into the fuel pile for Boiler #1 on a 12-month rolling total basis. [40 C.F.R. § 70.6(c)(1)]
- h. Calculations documenting the annual capacity factor individually for distillate fuel and wood on a 12-month rolling average basis. [40 C.F.R. § 60.49b(d)(1)]
- i. Fuel receipts from the supplier that certify that the distillate fuel fired meets the definition of distillate fuel. [40 C.F.R. § 60.49b(r)]
- j. The number of ESP fields in operation during all operating times and whether CDW was being combusted. [40 C.F.R. § 70.6(c)(1)]
- k. Dates where urea/aqueous ammonia injection is utilized and amounts of urea/aqueous ammonia reagent used on a daily, monthly, and 12-month rolling total basis. [40 C.F.R. § 70.6(c)(1)]
- l. Records of the calendar date, time, occurrence, and duration of each startup and shutdown. [40 C.F.R. § 70.6(c)(1)]
- m. Occurrence and duration of each malfunction of Boiler #1. [40 C.F.R. § 63.11225(c)]

- n. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.  
 [40 C.F.R. § 63.11225(c)]
- o. Copies of notifications and reports with supporting compliance documentation.  
 [40 C.F.R. § 63.11225(c)]
- p. The date of tune-up, procedures followed for tune-up, and the manufacturer’s specifications to which the boiler was tuned. [40 C.F.R. § 63.11225(c)]
- q. ESP primary and secondary voltages on each field monitored continuously and recorded at least once per day. [06-096 C.M.R. ch. 140, BPT (A-368-70-H-A, 4/5/2006)] **Enforceable by State-only**
- r. ESP primary and secondary current on each field monitored continuously and recorded at least once per day. [06-096 C.M.R. ch. 140, BPT (A-368-70-H-A, 4/5/2006)] **Enforceable by State-only**
- s. Temperature of the R-SCR catalyst bed during startup and records of when ammonia injection began (only when the R-SCR system is to be used).  
 [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
- t. Boiler temperature during startup and records of when urea/ammonia injection in the ECOTUBE began (only when the ECOTUBE system is to be used).  
 [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
- u. Records of inspections and any maintenance activities performed (planned or unplanned) on the multicyclone, ESP, R-SCR, or ECOTUBE systems.  
 [40 C.F.R. § 70.6(c)(1)]

17. Parameter Monitors

There are no Parameter Monitors required for Boiler #1.

18. CEMS and COMS

For Boiler #1, the table below lists the required continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS).

Pollutant and Continuous Monitors	Units	Averaging Period	Origin and Authority
NO <sub>x</sub> CEMS	ppm converted to lb/MMBtu	24-hr block average	06-096 C.M.R. ch. 117 and 06-096 C.M.R. ch. 138
O <sub>2</sub> CEMS	%	1-hr average	06-096 C.M.R. ch. 117
CO CEMS	ppmdv converted to lb/MMBtu	24-hr block average	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)
Opacity COMS	%	6-minute block average	40 C.F.R. § 60.48b(a)

**H. Engines**

RES operates three emergency engines. Diesel Unit 1 and Propane Unit 1 are emergency generator sets each consisting of an engine and electrical generator. The engine sizes, fuels, and ages are listed in the table below.

Equipment	Max. Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output	Fuel Type, % sulfur	Mfr. Date
Diesel Unit 1 (Generator)	3.33	23.8	341.3kW (475 hp)	Distillate fuel, 0.0015% by weight	2/1992
Diesel Unit 2 (Fire Pump)	1.37	9.8	196 hp (140 kW)		6/1988
Propane Unit 1 (Generator)	0.78	8.5	80 kW (112 hp)	Propane	1988

1. New Source Performance Standards (NSPS)

*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart IIII is not applicable to Diesel Units 1 or 2 since these units were manufactured prior to April 1, 2006.

*Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart JJJJ is not applicable to Propane Unit 1 since it was manufactured prior to January 1, 2009.

2. 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 Diesel Units 1 and 2 and Propane Unit 1. The units are considered existing, emergency stationary reciprocating internal combustion engines (RICE) at an area HAP source and are 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 these units from the federal requirements.

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.

Diesel Units 1 and 2 and Propane Unit 1 shall each be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as 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 these engines to not be considered emergency engines and therefore subject to all applicable requirements for non-emergency engines.

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

(1) Operation and Maintenance Requirements  
 [(40 C.F.R. § 63.6603(a) and Table 2(d))]

	<b>Operating Limitations</b>
Compression ignition (distillate fuel) units: Diesel Unit 1 Diesel Unit 2	<ul style="list-style-type: none"> <li>- Change oil and filter every 500 hours of operation or annually, whichever comes first;</li> <li>- Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and</li> <li>- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</li> </ul>
Spark ignition (natural gas, propane) units: Propane Unit 1	<ul style="list-style-type: none"> <li>- Change oil and filter every 500 hours of operation or annually, whichever comes first;</li> <li>- Inspect spark plugs every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and</li> <li>- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</li> </ul>

The engines shall be operated and maintained according to the manufacturer’s emission-related written instructions, or RES shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

(2) Optional Oil Analysis Program

RES has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, RES must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit for Maintenance and Testing

As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping

RES shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 63.6655(f)]

3. Emission Limits and Streamlining

- a. For Diesel Units 1 and 2 and Propane Unit 1, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (“\*” denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

<b>Diesel Unit 1</b>			
<b>Pollutant</b>	<b>Applicable Emission Standards</b>	<b>Origin and Authority</b>	<b>Licensed Emission Limits</b>
PM	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	0.12 lb/MMBtu
	0.40 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000) <b>Enforceable by State-only</b>	0.40 lb/hr <b>Enforceable by State-only</b>
PM <sub>10</sub>	0.40 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000) <b>Enforceable by State-only</b>	0.40 lb/hr <b>Enforceable by State-only</b>
SO <sub>2</sub>	0.01 lb/hr	06-096 C.M.R. ch. 140, BPT <b>Enforceable by State-only</b>	0.01 lb/hr <b>Enforceable by State-only</b>
NO <sub>x</sub>	14.69 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000) <b>Enforceable by State-only</b>	14.69 lb/hr <b>Enforceable by State-only</b>
CO	3.16 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000) <b>Enforceable by State-only</b>	3.16 lb/hr <b>Enforceable by State-only</b>
VOC	1.20 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015) <b>Enforceable by State-only</b>	1.20 lb/hr <b>Enforceable by State-only</b>

<b>Diesel Unit 2</b>			
<b>Pollutant</b>	<b>Applicable Emission Standards</b>	<b>Origin and Authority</b>	<b>Licensed Emission Limits</b>
PM	0.42 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015) <b>Enforceable by State-only</b>	0.42 lb/hr <b>Enforceable by State-only</b>
PM <sub>10</sub>	0.42 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015) <b>Enforceable by State-only</b>	0.42 lb/hr <b>Enforceable by State-only</b>
NO <sub>x</sub>	6.04 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015) <b>Enforceable by State-only</b>	6.04 lb/hr <b>Enforceable by State-only</b>
CO	1.30 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015) <b>Enforceable by State-only</b>	1.30 lb/hr <b>Enforceable by State-only</b>
VOC	0.49 lb/hr	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015) <b>Enforceable by State-only</b>	0.49 lb/hr <b>Enforceable by State-only</b>

<b>Propane Unit 1</b>			
<b>Pollutant</b>	<b>Applicable Emission Standards</b>	<b>Origin and Authority</b>	<b>Licensed Emission Limits</b>
PM	0.04 lb/hr	06-096 C.M.R. ch. 140, BPT <b>Enforceable by State-only</b>	0.04 lb/hr <b>Enforceable by State-only</b>
PM <sub>10</sub>	0.04 lb/hr	06-096 C.M.R. ch. 140, BPT <b>Enforceable by State-only</b>	0.04 lb/hr <b>Enforceable by State-only</b>
NO <sub>x</sub>	1.77 lb/hr	06-096 C.M.R. ch. 140, BPT <b>Enforceable by State-only</b>	1.77 lb/hr <b>Enforceable by State-only</b>
CO	2.74 lb/hr	06-096 C.M.R. ch. 140, BPT <b>Enforceable by State-only</b>	2.74 lb/hr <b>Enforceable by State-only</b>
VOC	0.02 lb/hr	06-096 C.M.R. ch. 140, BPT <b>Enforceable by State-only</b>	0.02 lb/hr <b>Enforceable by State-only</b>



b. *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101

Diesel Units 1 and 2 and Propane Unit 1 are each are subject to 06-096 C.M.R. ch. 101.

(1) Visible emissions from each engine shall not exceed an opacity of 20% on a 6-minute block average basis, except that for periods of startup RES may elect to comply with the work practice standards listed below in lieu of the numerical opacity limit.

(2) Work Practice Standard

- (i) Maintain a log (written or electronic) of the date, time, and duration of all engine startups.
- (ii) Operate the engines in accordance with the manufacturer's emission-related operating instructions.
- (iii) 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.
- (iv) Operate the engines, including any associated air pollution control equipment, 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.

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with Diesel Units 1 and 2 and Propane Unit 1 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

5. Compliance Assurance Monitoring

CAM is not applicable to Diesel Units 1 and 2 and Propane Unit 1.

6. Periodic Monitoring

RES shall record data and maintain records for the following monitoring values for Diesel Units 1 and 2 and Propane Unit 1:

- a. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]
- b. Log of the duration and reasons for all operating times as they occur.  
[40 C.F.R. §§ 63.6655(f)]
- c. Records of all maintenance conducted. [40 C.F.R. §§ 63.6655(e)]
- d. Sulfur content of the distillate fuel fired. (Diesel Units 1 and 2 only)  
[06-096 C.M.R. ch. 140, BPT]

7. Parameter Monitors

There are no Parameter Monitors required for Diesel Units 1 and 2 and Propane Unit 1.

8. CEMS and COMS

There are no CEMS or COMS required for Diesel Units 1 and 2 and Propane Unit 1.

**I. Portable Engines**

RES 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.

**J. Parts Washers**

RES utilizes two parts washers at the facility, one with a 40-gallon capacity in the Heavy Equipment Service/Maintenance Building, and one with a 20-gallon capacity in the boiler building lower floor. Based on the solvent used, they are subject to applicable requirements of *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.

### K. Emissions Statement

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

1. Hours each emission unit was active or operating on a monthly and calendar year basis.
2. The amount of each type of fuel fired in each emission unit.
3. The sulfur content of the fuel oil fired in each emission unit.
4. Total annual emissions (on a calendar year basis) calculated from the NO<sub>x</sub> and CO CEMS.

In reporting year 2020 and every third year thereafter, RES 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. RES 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)]

### L. Facility Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantified fugitive emissions are not included. Quantified emissions calculations are based on the following:

- Operation of Boiler #1 at 100% for 8,760 hrs/yr and licensed emission limits.
- Operating each emergency engine for 100 hrs/yr.

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

**Total Licensed Annual Emissions for the Facility**

**Tons/year**

(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	NH <sub>3</sub>	Lead
Boiler #1	88.3	88.3	155.5	706.4	1,766.0	206.0	39.6	0.35
Diesel Unit 1	–	–	–	0.7	0.2	0.1	–	–
Diesel Unit 2	–	–	–	0.3	0.1	–	–	–
Propane Unit 1	–	–	–	0.1	0.1	–	–	–
<b>Total TPY</b>	<b>88.3</b>	<b>88.3</b>	<b>155.5</b>	<b>707.5</b>	<b>1,766.4</b>	<b>206.1</b>	<b>39.6</b>	<b>0.35</b>

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

### III. AMBIENT AIR QUALITY ANALYSIS

RES 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-368-71-C-A/R issued on 7/26/1991). 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-368-70-N-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 RES 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 their application.

**Permit Shield Table**

Source	Citation	Description	Basis for Determination
Facility	06-096 C.M.R. ch. 134	VOC RACT	All VOC exempt per § 1(C)(4)
Boiler #1	40 C.F.R. 60, Subpart D	NSPS for Fossil-Fuel-Fired Steam Engines	Unit was constructed after 6/19/1986 and meets the applicability requirements of 40 C.F.R. § 60.40b(a).
Boiler #1	40 C.F.R. 60, Subpart Da	NSPS for Electric Utility Steam Generating Units	Fossil fuel firing capacity is less than 250 MMBtu/hr. [40 C.F.R. § 60.40a(a)]
Boiler #1	40 C.F.R. 60, Subpart CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	Unit does not burn solid waste.
Boiler #1	40 C.F.R. 60, Subpart DDDD	Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units	Unit does not burn solid waste.
Diesel Units 1 and 2	40 C.F.R. 60, Subpart IIII	NSPS for Stationary Compression Ignition Internal Combustion Engines	Units were constructed prior to the applicability date.
Propane Unit 1	40 C.F.R. 60, Subpart JJJJ	NSPS for Spark Ignition Internal Combustion Engines	Unit was constructed prior to the applicability date.

Source	Citation	Description	Basis for Determination
Facility	40 C.F.R. 64	Compliance Assurance Monitoring	No applicable sources at this facility
Facility	40 C.F.R. Part 98, Subpart II	GHG Reporting for Industrial Wastewater Treatment	Wastewater facility is an aerobic system

[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 06-096 C.M.R. ch. 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 maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. In addition, 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 by January 31 and July 31 of each year, or on an equivalent schedule specified in the license. 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 annually by January 31 of each year, 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) **Fuel Sulfur Content (Facility-wide)**

1. Distillate Fuel

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

2. Sulfur Content Compliance

Sulfur content compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered. 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]

(15) **Boiler #1**

- A. Boiler #1 shall not exceed a heat input rate of 672 MMBtu/hr on a 24-hour block average basis. Compliance shall be demonstrated by a steam production limit of 500,000 lb/hr and the monitoring and recordkeeping requirements of this license.  
[06-096 C.M.R. ch. 115, BACT (A-368-71-C-A/R, 7/26/1991)]
- B. Emissions from Boiler #1 shall vent to Stack #1 which shall be at least 290 feet above ground level. [06-096 C.M.R. ch. 115, BACT (A-368-71-C-A/R, 7/26/1991)]

- C. Ash and flyash from Boiler #1 shall be disposed of in accordance with the Department's Bureau of Remediation and Waste Management regulations. Ash shall be sufficiently conditioned with water or transported in covered (or enclosed) containers so as to prevent fugitive emissions. [06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000)] **Enforceable by State-only**
- D. RES shall notify the Department of any smoldering/smoking fuel piles or fuel pile fires by the next business day. The trigger for notification shall be visible emissions from a fuel pile in excess of the 06-096 C.M.R. ch. 101 fugitive emission limit of 20% opacity on a five (5) minute block average basis. [06-096 C.M.R. ch. 140, BPT (A-368-70-B-M, 7/3/2002)] **Enforceable by State-only**
- E. Fuels
1. Boiler #1 is licensed to fire biomass fuels, including sawmill residues, whole tree chips, and other biomass fuels. [06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)]
  2. Boiler #1 is also licensed to fire fuel oil including distillate fuel and specification waste oil. Only waste oil generated on-site and meeting the definition stated in this license shall be fired in Boiler #1. RES shall maintain records of a representative sample of the waste oil utilized demonstrating that the waste oil meets the allowable levels for the constituents and properties in accordance with 06-096 C.M.R. ch. 860. [06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987 and A-368-71-C-A/R, 7/26/1991)]
  3. Boiler #1 shall not fire more than 4,204,800 gallons per year of fuel oil (distillate fuel and waste oil combined) on a 12-month rolling total basis. (This is <10% of the annual capacity factor. Reference 40 C.F.R. §§ 60.42b(d) and 60.44b(c).) [06-096 C.M.R. ch. 140, BPT (A-368-70-F-R, 1/26/2010)]
  4. The amount of specification waste oil fired in Boiler #1 shall not exceed 5,000 gallons of the 4,204,800 gallons per year limit. [06-096 C.M.R. ch. 115, BACT (A-368-71-C-A/R, 7/26/1991)]
  5. The combined fuel oil use of Boiler #1 and the R-SCR shall not exceed 3,000 gallons on a 3-hour block total and 24,000 gallons per day. [06-096 C.M.R. ch. 140, BPT (A-368-70-F-R, 1/26/2010)]
  6. RES shall limit the quantity of clarifier waste cake burned in Boiler #1 to 1,000 tpy (as fired) on a 12-month rolling total basis. Compliance is based on the records of the amount of clarifier waste cake incorporated into the fuel pile. [06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000)] **Enforceable by State-only**

7. CDW Fuel

RES shall not combust CDW in Boiler #1, other than as part of a trial burn approved by the Department, unless either (a) or (b) below is met.

- a. RES demonstrates, to the Department's satisfaction, that facility-wide PTE while firing CDW does not exceed 10 tpy of any single HAP or 25 tpy for all HAP combined. For this requirement to be met, RES must receive agreement from the Department in writing prior to combusting CDW in Boiler #1 (other than as part of a trail burn).

**OR**

- b. RES becomes subject to 40 C.F.R. Part 63, Subpart DDDDD, in which case, RES shall comply with the following:
  - (1) Pursuant to 40 C.F.R § 63.9(j), RES shall notify the EPA and the Department in writing within 15 days of the change in Subpart DDDDD applicability, i.e., that RES has become subject to Subpart DDDDD.
  - (2) RES shall be in compliance with Subpart DDDDD upon resuming combustion of CDW. The date RES resumes combustion of CDW shall be considered the "compliance date."
  - (3) In accordance with 40 C.F.R. § 63.7510(e), the initial compliance demonstration must be completed within 180 days of the compliance date.

[06-096 C.M.R. ch. 140, BPT (A-368-70-M-A, 1/27/2020)]

F. Control Equipment

1. RES shall operate and maintain a multiple centrifugal cyclone separator (multicyclone) followed by an electrostatic precipitator (ESP) for control of PM emissions. [06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)]
2. With the exception of startup, the ESP shall be operated with at least the same number of ESP chambers and the same number of fields per chamber that operated during the most recent emissions test which demonstrated compliance with the PM emission limit. [06-096 C.M.R. ch. 140, BPT (A-368-70-L-R)]

**Enforceable by State-only**

3. Upon written notification to the Department, and in accordance with the Bureau of Air Quality's *Air Emission Compliance Test Protocol*, RES may perform additional emissions testing demonstrating that compliance with the PM emission limit can be maintained under alternative ESP operating scenarios, but under no circumstances shall REA be relieved of its obligation to meet its licensed emission limits. [06-096 C.M.R. ch. 140, BPT (A-368-70-F-R, 1/26/2010)]  
**Enforceable by State-only**
4. While burning fuel containing CDW, with the exception of startup, shutdown, and malfunction, RES shall operate the ESP with all fields energized. If a malfunction should result in loss of an ESP field or chamber at any time while combusting CDW, RES must take immediate action to correct the failed field or chamber and return it to service within 72 hours unless provisions to combust only non-CDW fuels have been executed within this time. [06-096 C.M.R. ch. 140, BPT (A-368-70-H-A, 4/5/2006)] **Enforceable by State-only**
5. RES shall operate add-on NO<sub>x</sub> emission control technology as needed to meet the NO<sub>x</sub> emission limits for Boiler #1. [06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015)] **Enforceable by State-only**
  - a. RES is not required to operate the R-SCR system during Boiler #1 operation provided NO<sub>x</sub> emission limits set forth in this license are met. [06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)] **Enforceable by State-only**
  - b. RES is not required to operate the ECOTUBE system during Boiler #1 operation provided NO<sub>x</sub> emission limits set forth in this license are met. [06-096 C.M.R. ch. 140, BPT (A-368-70-F-R, 1/26/2010)]  
**Enforceable by State-only**
6. When the R-SCR system is to be operated, ammonia shall not be injected into the R-SCR system during startup or shutdown unless the catalyst bed is at or above the manufacturer's specified minimum operation temperature. [06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)] **Enforceable by State-only**
7. When the ECOTUBE system is to be operated, urea/ammonia shall not be injected into the ECOTUBE system until the boiler is at normal operating temperature. [06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)]  
**Enforceable by State-only**

G. Boiler #1 Emission Limits

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

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

Pollutant	ppmdv	Origin and Authority	Enforceability
NH <sub>3</sub>	20 @ 12% CO <sub>2</sub>	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	<b>Enforceable by State-only</b>

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

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.030	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	Federally Enforceable
NO <sub>x</sub>	0.30 (24-hr block avg)	06-096 C.M.R. ch. 138, § (3)(B)(3)	Federally Enforceable
	0.24 (24-hr block avg) (See Note 1)	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	<b>Enforceable by State-only</b>
CO	0.60 (24-hr block avg)	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	Federally Enforceable
VOC	0.070	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	Federally Enforceable

Note 1: Applies at all operating times except during startup and low load conditions of less than 30 MW net generation.

3. Emissions from Boiler #1 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	20.2	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	Federally Enforceable
PM <sub>10</sub>	20.2	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	<b>Enforceable by State-only</b>
SO <sub>2</sub>	35.5	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	Federally Enforceable
NO <sub>x</sub>	161.3	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	Federally Enforceable
CO	403.2	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	Federally Enforceable
VOC	47.0	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)	Federally Enforceable
Lead	0.08	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	<b>Enforceable by State-only</b>
NH <sub>3</sub>	9.04	06-096 C.M.R. ch. 140, BPT (A-368-70-E-A, 1/4/2005)	<b>Enforceable by State-only</b>

#### H. Visible Emissions

Visible emissions from Boiler #1 shall not exceed 20% opacity on a 6-minute block average basis, except for one 6-minute block average per hour of not more than 27% opacity. This standard applies at all times, except during periods of startup, shutdown, or malfunction. [40 C.F.R. §§ 60.43b(f) and (g)]

#### I. Startup/Shutdown

During periods of startup and shutdown, RES shall operate Boiler #1 in accordance with the following work practice standards:

1. RES shall adhere to the manufacturer's suggested standard operating procedures for startup and shutdown.
2. Boiler #1 shall not fire CDW during startup until all ESP fields are energized. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

#### J. Compliance Methods

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

1. RES shall demonstrate compliance with the PM lb/MMBtu and lb/hr emission limits through performance testing conducted at least once every five calendar years. The next compliance test is due no later than 12/31/2024. [06-096 C.M.R. ch. 115, BACT (A-368-71-G-M, 6/12/1996) and 38 M.R.S. § 589.2]
2. RES shall demonstrate compliance with the SO<sub>2</sub> lb/MMBtu emission limit through the recordkeeping requirements of this license. [40 C.F.R. §§ 60.49b(d)(1) and (r)]
3. RES shall demonstrate compliance with the NO<sub>x</sub> lb/MMBtu emission limits through use of a NO<sub>x</sub> CEMS. [06-096 C.M.R. ch. 117 § 1(B)(2) and 06-096 C.M.R. ch. 138, § 3(B)(6)]

For periods of startup, shutdown, or malfunction during which CEMS data show periods of high O<sub>2</sub> (greater than 16% O<sub>2</sub>) in the stack gas, RES may identify the event, as appropriate (startup, shutdown, or malfunction), and exclude the data from emission rate compliance calculations, though the data during such occurrences must still be maintained and reported. [06-096 C.M.R. ch. 140, BPT (A-368-70-F-R, 1/26/2010)]



4. RES shall demonstrate compliance with the CO lb/MMBtu emission limits through use of a CO CEMS. [06-096 C.M.R. ch.115, BACT (A-368-71-A-N, 3/10/1987)]

For periods of startup, shutdown, or malfunction during which CEMS data show periods of high O<sub>2</sub> (greater than 16% O<sub>2</sub>) in the stack gas, RES may identify the event, as appropriate (startup, shutdown, or malfunction), and exclude the data from emission rate compliance calculations, though the data during such occurrences must still be maintained and reported. [06-096 C.M.R. ch. 140, BPT (A-368-70-F-R, 1/26/2010)]

5. RES shall demonstrate compliance with the NH<sub>3</sub> ppmdv and lb/hr emission limits through performance testing conducted at least once every two calendar years. The next compliance test is due no later than 12/31/2020. [06-096 C.M.R. ch. 115, BACT (A-368-70-E-A, 1/4/2005)]
6. RES shall demonstrate compliance with the visible emission limits through the use of a COMS. [40 C.F.R. § 60.48b(a)]
7. Upon request by the Department, RES shall conduct performance testing to demonstrate compliance with the VOC lb/MMBtu emission limits using test methods approved by the Department. [40 C.F.R. § 70.6(c)(1)]
8. Upon request by the Department, RES shall conduct performance testing to demonstrate compliance with the PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC lb/hr emission limits using test methods approved by the Department. [40 C.F.R. § 70.6(c)(1)]

#### K. Periodic Monitoring

RES shall record data and maintain records for the following monitoring values for Boiler #1.

1. Hours of operation for Boiler #1 on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
2. Amounts of each fuel combusted during each day and on a monthly basis. [40 C.F.R. § 60.49b(d)(1) and 06-096 C.M.R. ch. 137]
3. Amount of fuel oil (distillate fuel and specification waste oil combined) fired in Boiler #1 and R-SCR combined on a 12-month rolling total basis. [40 C.F.R. § 70.6(c)(1)]
4. Amount of fuel oil (distillate fuel and specification waste oil combined) fired in Boiler #1 and R-SCR combined on a 3-hour block and daily block total basis. [40 C.F.R. § 70.6(c)(1)]
5. Amount of specification waste oil fired on a 12-month rolling total basis. [40 C.F.R. § 70.6(c)(1)]

6. Steam flow rate and steam temperature monitored continuously to document compliance with the steam production limit. [40 C.F.R. § 70.6(c)(1)]
7. Amount of clarifier waste cake incorporated into the fuel pile for Boiler #1 on a 12-month rolling total basis. [40 C.F.R. § 70.6(c)(1)]
8. Calculations documenting the annual capacity factor individually for distillate fuel and wood on a 12-month rolling average basis. [40 C.F.R. § 60.49b(d)(1)]
9. Fuel receipts from the supplier that certify that the distillate fuel fired meets the definition of distillate fuel. [40 C.F.R. § 60.49b(r)]
10. The number of ESP fields in operation during all operating times and whether CDW was being combusted. [40 C.F.R. § 70.6(c)(1)]
11. Dates where urea/aqueous ammonia injection is utilized and amounts of urea/aqueous ammonia reagent used on a daily, monthly, and 12-month rolling total basis. [40 C.F.R. § 70.6(c)(1)]
12. Records of the calendar date, time, occurrence, and duration of each startup and shutdown. [40 C.F.R. § 70.6(c)(1)]
13. Occurrence and duration of each malfunction of Boiler #1.  
[40 C.F.R. § 63.11225(c)]
14. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.  
[40 C.F.R. § 63.11225(c)]
15. Copies of notifications and reports with supporting compliance documentation.  
[40 C.F.R. § 63.11225(c)]
16. The date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. [40 C.F.R. § 63.11225(c)]
17. ESP primary and secondary voltages on each field monitored continuously and recorded at least once per day. [06-096 C.M.R. ch. 140, BPT (A-368-70-H-A, 4/5/2006)] **Enforceable by State-only**
18. ESP primary and secondary current on each field monitored continuously and recorded at least once per day. [06-096 C.M.R. ch. 140, BPT (A-368-70-H-A, 4/5/2006)] **Enforceable by State-only**
19. Temperature of the R-SCR catalyst bed during startup and records of when ammonia injection began (only when the R-SCR system is to be used).  
[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
20. Boiler temperature during startup and records of when urea/ammonia injection in the ECOTUBE began (only when the ECOTUBE system is to be used).  
[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
21. Records of inspections and any maintenance activities performed (planned or unplanned) on the multicyclone, ESP, R-SCR, or ECOTUBE systems.  
[40 C.F.R. § 70.6(c)(1)]

L. CEMS and COMS

1. RES shall operate and maintain the following continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS) for Boiler #1 whenever the unit is operating:

<b>Pollutant and Continuous Monitors</b>	<b>Units</b>	<b>Averaging Period</b>	<b>Origin and Authority</b>
NO <sub>x</sub> CEMS	ppm converted to lb/MMBtu	24-hr block average	06-096 C.M.R. ch. 117 and 06-096 C.M.R. ch. 138
O <sub>2</sub> CEMS	%	1-hr average	06-096 C.M.R. ch. 117
CO CEMS	ppmdv converted to lb/MMBtu	24-hr block average	06-096 C.M.R. ch. 115, BACT (A-368-71-A-N, 3/10/1987)
Opacity COMS	%	6-minute block average	40 C.F.R. § 60.48b(a)

2. The span value for the COMS shall be between 60 – 80%.  
[40 C.F.R. § 60.48b(e)(1)]

M. 40 C.F.R. Part 60, Subpart Db

Following are applicable requirements of 40 C.F.R. Part 60, Subpart Db for Boiler #1 not addressed elsewhere in this Order:

RES shall prepare and submit to the Department and EPA the following reports every six months. All reports shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period. [40 C.F.R. § 60.49b(w)]

1. Excess emissions report. Excess emissions are defined as all 6-minute periods during which the average opacity exceeds the standard. [40 C.F.R. § 60.49b(h)]
2. Reports certifying that only very low sulfur oil (i.e. distillate fuel) and other fuels that are known to contain insignificant amounts of sulfur (i.e. wood) were combusted in Boiler #1 during the reporting period. [40 C.F.R. § 60.49b(r)]

N. 40 C.F.R. Part 63, Subpart JJJJJ

Following are applicable requirements of 40 C.F.R. Part 63, Subpart JJJJJ for Boiler #1 not addressed elsewhere in this Order:

1. Work Practice Requirements and Reports

a. Boiler Tune-Up Program

(1) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

(2) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
Existing biomass boiler with oxygen trim system which maintains an optimum air-to-fuel ratio (Boiler #1)	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

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

- (i) 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 for up to 72 months from the previous inspection for boilers with oxygen trim systems. [40 C.F.R. § 63.11223(b)(1)]
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
- (iii) 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 for up to 72 months from the previous inspection for boilers with oxygen trim systems. [40 C.F.R. § 63.11223(b)(3)]
- (iv) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
- (v) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, 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 C.F.R. § 63.11223(b)(5)]

- (vi) 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 C.F.R. § 63.11223(b)(7)]
- (4) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
  - (i) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - (ii) A description of any corrective actions taken as part of the tune-up of the boiler; and
  - (iii) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.  
[40 C.F.R. § 63.11223(b)(6)]

b. Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (1) Company name and address;
- (2) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (3) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (4) The following certifications, as applicable:
  - (i) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - (ii) "No secondary materials that are solid waste were combusted in any affected unit."
  - (iii) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for

a boiler of similar design if manufacturer’s recommended procedures are not available.”

2. Recordkeeping

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system.  
 [40 C.F.R. § 63.11225(a)(4)(vi)]

(16) **Engines**

A. Allowable Fuels

1. Diesel Units 1 and 2 are licensed to fire distillate fuel.
  2. Propane Unit 1 is licensed to fire propane.
- [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

B. Emission Limits

Emissions shall each not exceed the following limits.  
 Emission limits are on a 1-hour block average basis unless otherwise stated.

<b>Diesel Unit 1</b>			
<b>Pollutant</b>	<b>lb/MMBtu</b>	<b>Origin and Authority</b>	<b>Enforceability</b>
PM	0.12	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	Federally Enforceable

<b>Diesel Unit 1</b>			
<b>Pollutant</b>	<b>lb/hr</b>	<b>Origin and Authority</b>	<b>Enforceability</b>
PM	0.40	06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000)	<b>Enforceable by State-only</b>
PM <sub>10</sub>	0.40	06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000)	<b>Enforceable by State-only</b>
SO <sub>2</sub>	0.01	06-096 C.M.R. ch. 140, BPT	<b>Enforceable by State-only</b>
NO <sub>x</sub>	14.69	06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000)	<b>Enforceable by State-only</b>
CO	3.16	06-096 C.M.R. ch. 140, BPT (A-368-70-A-I, 10/24/2000)	<b>Enforceable by State-only</b>
VOC	1.20	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015)	<b>Enforceable by State-only</b>

<b>Diesel Uni 2</b>			
<b>Pollutant</b>	<b>lb/hr</b>	<b>Origin and Authority</b>	<b>Enforceability</b>
PM	0.42	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015)	<b>Enforceable by State-only</b>
PM <sub>10</sub>	0.42	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015)	<b>Enforceable by State-only</b>
NO <sub>x</sub>	6.04	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015)	<b>Enforceable by State-only</b>
CO	1.30	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015)	<b>Enforceable by State-only</b>
VOC	0.49	06-096 C.M.R. ch. 140, BPT (A-368-70-L-R, 2/4/2015)	<b>Enforceable by State-only</b>

<b>Propane Unit 1</b>			
<b>Pollutant</b>	<b>lb/hr</b>	<b>Origin and Authority</b>	<b>Enforceability</b>
PM	0.04	06-096 C.M.R. ch. 140, BPT	<b>Enforceable by State-only</b>
PM <sub>10</sub>	0.04	06-096 C.M.R. ch. 140, BPT	<b>Enforceable by State-only</b>
NO <sub>x</sub>	1.77	06-096 C.M.R. ch. 140, BPT	<b>Enforceable by State-only</b>
CO	2.74	06-096 C.M.R. ch. 140, BPT	<b>Enforceable by State-only</b>
VOC	0.02	06-096 C.M.R. ch. 140, BPT	<b>Enforceable by State-only</b>

C. Visible Emissions

Visible emissions from each of the emergency engines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time RES may comply with the following work practice standards in lieu of the numerical opacity limit. [06-096 C.M.R. ch. 101, § 3(A)(4)]

1. Maintain a log (written or electronic) of the date, time, and duration of all engine startups.
2. Operate the engines 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. Operate the engines, including any associated air pollution control equipment, 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.

D. Compliance Methods

Compliance with the emission limits associated with Diesel Units 1 and 2 and Propane Unit 1 shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [40 C.F.R. § 70.6(c)(1)]

E. Periodic Monitoring

RES shall record data and maintain records for the following monitoring values for Diesel Units 1 and 2 and Propane Unit 1.

1. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]
2. Log of the duration and reasons for all operating times as they occur. [40 C.F.R. §§ 63.6655(f)]
3. Records of all maintenance conducted. [40 C.F.R. §§ 63.6655(e)]
4. Sulfur content of the distillate fuel fired. (Diesel Units 1 and 2 only) [06-096 C.M.R. ch. 140, BPT]

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

Following are applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ for Diesel Units 1 and 2 and Propane Unit 1 not addressed elsewhere in this Order:

1. RES shall meet the following operational limitations for each of the compression ignition emergency engines (Diesel Units 1 and 2):
  - a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
  - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6602 and Table 2(c) and 06-096 C.M.R. ch. 140, BPT]



2. RES shall meet the following operational limitations for the spark ignition emergency engine (Propane Unit 1):
  - a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
  - b. Inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6602 and Table 2(c) and 06-096 C.M.R. ch. 140, BPT]

3. Oil Analysis Program Option

RES has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, RES must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R. § 63.6625(i)]

4. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each engine.

[40 C.F.R. § 63.6625(f)]

5. Maintenance, Testing, and Non-Emergency Operating Situations

- a. The engines shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 140, BPT]
- b. RES shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

6. Operation and Maintenance

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or RES shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

7. Startup Idle and Startup Time Minimization

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

(17) **Parts Washer**

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

A. RES shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 140, BPT]

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. RES 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  
[06-096 C.M.R. ch. 130]

(18) **CEMS Recordkeeping**

- A. The licensee shall maintain records documenting that all CEMS and COMS are continuously accurate, reliable, and 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;
- B. The licensee shall maintain 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; and
- C. The licensee shall maintain records of 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] **Enforceable by State-only**

(19) **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, Continuous Emission Monitoring Systems (CEMS), and Continuous Opacity Monitoring Systems (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.

(20) **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 31<sup>st</sup>** and **July 31<sup>st</sup>** 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 monitoring required by this license.
- D. Each semiannual report shall include the annual capacity factor for each fuel fired in Boiler #1.
- E. 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.

(21) **Annual Compliance Certification**

RES 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 31<sup>st</sup>** 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]

(22) **Annual Emission Statement**

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, RES 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. RES shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
1. Hours each emission unit was active or operating on a monthly and calendar year basis.
  2. The amount of each type of fuel fired in each emission unit.
  3. The sulfur content of the fuel oil fired in each emission unit.
  4. Total annual emissions (on a calendar year basis) calculated from the NO<sub>x</sub> and CO CEMS.  
[06-096 C.M.R. ch. 137]
- C. In reporting year 2020 and every third year thereafter, RES shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). RES 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)]

(23) **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

(24) **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]

(25) **Asbestos Abatement**

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

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

- A. RES 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**

(27) **New Source Review**

RES 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 Emission License, A-368-70-N-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 5<sup>th</sup> DAY OF AUGUST, 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: 7/26/2019  
Date of application acceptance: 7/29/2019

Date filed with the Board of Environmental Protection:  
This Order prepared by Lynn Muzzey, Bureau of Air Quality.

**FILED**  
AUG 5, 2020  
State of Maine  
Board of Environmental Protection