

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

#### **DEPARTMENT ORDER**

ReEnergy Livermore Falls LLC Androscoggin County Livermore Falls, Maine A-555-70-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 Livermore Falls LLC
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	221119
NATURE OF BUSINESS	Electric Power Generation
FACILITY LOCATION	267 Diamond Road, Livermore Falls, Maine

ReEnergy Livermore Falls LLC (RELF) is a biomass-fired electric generating facility capable of generating approximately 36 net megawatts of electricity. The plant consists of one steam generating unit (Boiler #1) which fires primarily sawmill residues and whole tree chips.

RELF has the potential to emit more than 100 tons per year (tpy) of nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO); therefore, the source is classified as a major source for criteria pollutants.

RELF 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; therefore, the source is classified as an area source for HAP.

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

### **B.** Emission Equipment

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

#### **Boiler**

2

	Maximum	Max.		
	Heat Input	Firing		
	Capacity	Rate		Install.
Equipment	(MMBtu/hr)	(ton/hr)	Fuel Type, % sulfur	Date
Boiler #1	585.9	65.1	biomass, negligible	1992

#### **Engines**

	Maximum Heat Input Capacity	Max. Firing Rate		Install.
Equipment	(MMBtu/hr)	(gal/hr)	Fuel Type, % sulfur	Date
Generator #3	3.7	27.0	distillate fuel, 0.0015%	1992
Fire Pump #1	1.6	11.7	distillate fuel, 0.0015%	1992

RELF also operates a parts washer which does not meet the exemption criteria found in *Solvent Degreasers*, 06-096 C.M.R. ch. 130.

RELF 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	
CEMS	Continuous Emissions Monitoring System	
CO	Carbon Monoxide	
CO <sub>2</sub> e	Carbon Dioxide equivalent	
COMS	Continuous Opacity Monitoring System	
EPA or US EPA	United States Environmental Protection Agency	

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

ESP	Electrostatic Precipitator	
gal/hr	gallon per hour	
GHG	Greenhouse Gases	
HAP	Hazardous Air Pollutants	
HC1	Hydrogen Chloride or Hydrochloric Acid	
lb	pound	
lb/hr	pounds per hour	
lb/MMBtu	pounds per million British Thermal Units	
M.R.S.	Maine Revised Statutes	
MMBtu	Million British Thermal Units	
MMBtu/hr	million British Thermal Units per hour	
NESHAP	National Emissions Standards for Hazardous Air Pollutants	
NO <sub>x</sub>	Nitrogen Oxides	
NSPS	New Source Performance Standards	
NSR	New Source Review	
$O_2$	Oxygen	
PM	Particulate Matter less than 100 microns in diameter	
PM <sub>10</sub>	Particulate Matter less than 10 microns in diameter	
ppmdv	parts per million on a dry volume basis	
RACT	Reasonably Available Control Technology	
RICE	Reciprocating Internal Combustion Engine	
$SO_2$	Sulfur Dioxide	
tpy	ton per year	
VOC	Volatile Organic Compounds	

3

#### **D.** Definitions

<u>24-hour block average</u> means midnight to midnight.

<u>Biomass</u> means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings). 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. RELF should consult with the Department before adding any new biomass type to its fuel mix.

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

<u>Continuously</u>. With respect to the operation of monitors, CEMS, and COMS required by this license, *continuously* means providing equally spaced data points with at least one valid data point in each successive 15-minute period. A minimum of three valid 15-minute periods constitutes a valid hour.

#### 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.

*Records* or *Logs* mean either hardcopy or electronic records.

### 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 RELF 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. General Facility Requirements

RELF 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.

Citation	Requirement Title	
06-096 C.M.R. ch. 101	Visible Emissions Regulation	
06-096 C.M.R. ch. 102	Open Burning	
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard	
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation	
06-096 C.M.R. ch. 109	Emergency Episode Regulations	
06-096 C.M.R. ch. 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	

Citation	Requirement Title	
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,	Standards of Performance for Industrial-Commercial-	
Subpart Db	Institutional Steam Generating Units	
40 C.F.R. Part 63,	National Emission Standard for Hazardous Air Pollutants	
Subpart ZZZZ	for Stationary Reciprocating Internal Combustion Engines	
40 C.F.R. Part 63,	National Emission Standards for Hazardous Air Pollutants	
Subpart JJJJJJ	for Industrial, Commercial, and Institutional Boilers Area	
	Sources	
40 C.F.R. Part 70	State Operating Permit Programs	

5

#### 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. Boiler #1 is subject to NO<sub>x</sub> emission standards and NO<sub>x</sub> CEMS requirements contained in 06-096 C.M.R. ch. 138. 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 tons/year. RELF is exempt from these requirements, because the facility does not have the potential to emit more than

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

40 tpy of VOC from non-exempt VOC-emitting equipment and processes. Boiler #1 and the engines are exempt from VOC RACT requirements, because the VOC emissions from this equipment are due to incomplete combustion.

6

#### 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, pursuant to *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.

RELF is not a facility found in either Table A-3 or A-4. Emissions of CO<sub>2</sub> (but not CH<sub>4</sub> or N<sub>2</sub>O) are excluded from the calculation when determining applicability in (a)(3) above for biomass-fired units pursuant to 40 C.F.R. § 98.2(b)(2). Therefore, RELF is not subject to the 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.

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

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

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

		CAM		
Units	Pollutant	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)
	$NO_x$	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. Boiler #1

RELF is a biomass-fired electric generating facility consisting of one 585.9 MMBtu/hr biomass-fired boiler (Boiler #1) manufactured by Zurn Energy and installed in 1992. Boiler #1 supplies steam to a General Electric steam turbine capable of producing approximately 39.6 gross megawatts of electrical power. RELF demonstrates the heat input to the boiler does not exceed 585.9 MMBtu/hr by not exceeding a steam production limit of 367,400 lb/hr. [06-096 C.M.R. ch. 115, BACT (A-555-72-D-R, 1/17/1996)]

Fuel is fed from six individual screw feeder bins directly to the spreader stoker where fuel is blown across a trajectory plate and into the furnace portion of the boiler. Fuel is distributed on the traveling grate (both front-to-rear and laterally) via high pressure transport air settings and the trajectory plate angle setting. Heavier particles are spread evenly on the back of the traveling grate surface while fine particles are rapidly burned in suspension. Undergrate air is evenly distributed through the active grate area to aid the combustion process. Three levels of high pressure overfire air jets provide turbulence and thorough mixing of fuel and air to complete the combustion process.

The boiler is constructed of water-cooled walls with one refractory wall adjacent to the stoker and is sized and constructed to provide the time, temperature, and turbulence necessary to provide good combustion of biomass fuel. The boiler combustion control system automatically controls the fuel feeder speed and the undergrate and overfire air flow.

While not currently in use, an ECOTUBE system is installed in Boiler #1. The ECOTUBE system consists of two liquid cooled, retractable opposing tubes (ECOTUBEs) installed in a specific location in the upper furnace area of the boiler. When engaged, the ECOTUBEs

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

act as an advanced, high-pressure overfire air system with urea injection capabilities. By using two opposing tubes, it is possible to cover almost all of the horizontal cross-section in the boiler. Ambient air is introduced into the boiler through the ECOTUBEs at high pressure and speed through strategically located nozzles, resulting in a potential increase in combustion efficiency and a reduction in overall criteria pollutant emissions. When in operation, the ECOTUBE system has the potential to also reduce emissions of PM, NO<sub>x</sub>, CO, and VOC. Previous BACT analyses have never required RELF to use the ECOTUBE system provided RELF is able to demonstrate compliance with their established NO<sub>x</sub> emission limit without this added control option.

8

#### 1. Distillate Fuel

RELF licensed the installation of a 105 MMBtu/hr distillate fuel-fired auxiliary burner in Air Emission License A-555-70-H-A (5/10/2005). However, this equipment was never installed and any associated New Source Review (NSR) conditions are considered obsolete.

### 2. Reprocessed Wood Fuel (RWF)

RELF has previously been licensed to fire reprocessed wood fuel (RWF) which consists of chipped utility poles, railroad ties, and other similar chemically treated wood.

Creosote-treated railroad ties are specifically listed as a non-hazardous secondary material that is not a solid waste per 40 C.F.R. § 241.4. However, that designation only applies to units designed to burn both biomass and fuel oil as part of normal operations [40 C.F.R. § 241.4(a)(7)]. Boiler #1 is not designed to burn fuel oil. Therefore, combustion of RWF in Boiler #1 would be classified as incineration of a waste material and thus make Boiler #1 subject to *Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units*, 40 C.F.R. Part 60, Subpart DDDD.

At this time, RELF does not intend to fire RWF as part of the fuel mix for Boiler #1. RELF shall modify their air emission license to address the applicable requirements of 40 C.F.R. Part 60, Subpart DDDD prior to combusting RWF in Boiler #1.

#### 3. Construction and Demolition Debris (CDD)

RELF is licensed to fire biomass in Boiler #1, including construction and demolition debris (CDD). CDD is considered to be a type of biomass and not a solid waste provided RELF obtains a written certification from the CDD processing facility that the CDD has been processed by trained operators in accordance with best management practices. [40 C.F.R. § 241.4(a)(5)]

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

Facilities which have the potential to emit 10 tpy or more of any single HAP and/or 25 tpy or more of all HAP combined are classified as major HAP sources. The firing of CDD has the potential to increase emissions of HAP, especially hydrogen chloride (HCl). Previous stack testing indicated that including CDD in the fuel mix at high amounts (~50% by weight) could result in potential emissions of HCl greater than 10 tpy, classifying RELF as a major source of HAP.

In December 2019, RELF conducted a series of trial burns firing pre-mixed biomass with CDD contents of 5%, 10%, and 15%, by weight, to determine whether CDD could be fired at a lower rate without exceeding major source thresholds for HAP.

Test results showed that at a firing rate of 15% CDD, potential annual emissions of HCl would be approximately 5.1 tpy. These results are consistent with what would be expected if the previous testing at 50% CDD were pro-rated to 15% CDD. Potential annual emissions of total HAP when firing CDD at 15% of the fuel mix are estimated to be approximately 16 tpy.

Therefore, in Air Emission License A-555-70-M-A (4/14/2020), RELF requested a federally enforceable license restriction limiting the CDD content of the biomass fired in Boiler #1 to 15% on an annual basis and clarified that, with this restriction, RELF may fire CDD while still being classified as an area source of HAP. Compliance shall be demonstrated by records of the amount of both virgin biomass and CDD fired on a daily, monthly, and 12-month rolling total basis.

#### 4. Knots and Screenings

RELF is licensed to burn paper mill knots and screenings. Knots and screenings are bundles of wood cellulose fiber still held together by lignin after the pulping process. Air Emission License A-555-70-B-A (4/25/2001) addressed BACT for the addition of this biomass fuel to Boiler #1.

The pollutant of concern resulting from the firing of knots and screenings is SO<sub>2</sub>. The material has been previously tested at 1,500 ppm sulfur. At this concentration, the maximum firing rate of this fuel must remain below 5.62 ton/hour so as to not necessitate an additional modeling analysis. Therefore, RELF is limited to the firing of 5.62 ton/hr and 10,000 ton/year (12-month rolling total basis) of knots and screenings.

#### 5. Waste Oil

RELF is licensed to burn up to 5,000 gal/year (12-month rolling total) of specification waste oil in Boiler #1. [06-096 C.M.R. ch. 115, BACT (A-555-72-E-M, 3/23/1994)]

The waste oil is generated from on-site maintenance activities and mixed with the biomass before it is sent to the boiler. RELF shall not bring in off-site waste oil to be

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

combusted. Emissions from this activity are considered incidental and are included in the emission limits for combustion of biomass.

10

### 6. Control Equipment

#### a. PM Control Methods

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

When burning CDD, RELF shall operate the three-field ESP with all fields energized.

If a malfunction should result in loss of an ESP field or chamber at any time while combusting CDD, RELF 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-CDD fuels have been executed within this time.

RELF shall keep track of all field downtime while combusting CDD and notify the Department within 48 hours if a field goes down for over 1 ½ hours.

When burning fuels other than CDD, with the exception of during cold startup, RELF shall operate, at a minimum, the number of ESP fields that operated during the most recent stack test demonstrating compliance with the licensed PM emissions limits. Upon written notification to the Department, and in accordance with the *Bureau of Air Quality's Air Emission Compliance Test Protocol*, RELF may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall RELF be relieved of its obligation to meet its licensed emission limits.

RELF shall maintain records 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

When necessary, RELF controls NO<sub>x</sub> emissions through the use of selective non-catalytic reduction (SNCR).

The SNCR system injects urea through 44 ports (20 on the North wall, 10 on the South wall, 7 on the East wall, and 7 on the West wall) into the boiler at a point where the flue gas is at the correct temperature to reduce  $NO_x$  emissions.

While in use, RELF shall maintain a system of inspection and maintenance (I&M) for the SNCR system. At a minimum, the I&M program will include periodic inspection of the systems to ensure their integrity and proper function. RELF shall

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

document compliance by means of an inspection and maintenance log in which RELF shall record all inspection dates and findings as well as routine and non-routine maintenance required to ensure proper operation.

11

RELF installed the SNCR system primarily for the purpose of optimizing emissions of NO<sub>x</sub>, allowing RELF an opportunity to participate as a qualifying renewable energy provider in New England's renewable energy markets. RELF is not required to operate the SNCR system provided Boiler #1 does not exceed the 0.15 lb/MMBtu NO<sub>x</sub> emission limit as required in this license. Whenever the SNCR system is in use, RELF shall maintain records of urea injection operations, including dates urea injection is utilized and amounts of urea reagent used on a daily, monthly, and 12-month rolling total basis.

### 7. 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

Pursuant to 40 C.F.R. Part 60, Subpart Db, Boiler #1 is subject to an emission standard for PM identified in the Emission Limits and Streamlining table in this section.

Standards for visible emissions (opacity) are described in Section II(F)(10)(b) of this license.

#### b. Monitoring Requirements

RELF shall install, calibrate, maintain, and operate a COMS on Boiler #1 and record the output of the system. [40 C.F.R. § 60.48b(a)]

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

#### c. Recordkeeping

RELF 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 calendar month; [40 C.F.R. § 60.49b(d)(2)]

12

(2) Records of COMS data and calculated averages. [40 C.F.R. § 60.49b(f)]

#### d. Reports

RELF shall prepare and submit to the Department and EPA an Excess Emissions report 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)]

Excess emissions are defined as all six-minute periods during which the average opacity exceeds the standard. [40 C.F.R. § 60.49b(h)]

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

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 JJJJJJ. 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. <u>As applicable</u>, 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, <u>as applicable</u>, 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)]

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

- 3. Inspect the system controlling the air-to-fuel ratio, <u>as applicable</u>, 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 startup.

  [40 C.F.R. § 63.11223(b)(7)]
- (iv) <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and submitted to the Department and/or EPA upon request. 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. [40 C.F.R. § 63.11223(b)(6)]

#### (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;

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

(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

Boiler #1 is subject to the energy assessment requirement as follows:

- (i) A one-time energy assessment was required to be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 C.F.R. § 63.11196(a)(3)] RELF's one-time energy assessment was completed on January 28, 2014.
- (ii) A Notification of Compliance Status was required to 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(c)] RELF submitted their Notification of Compliance Status to EPA on July 10, 2014.

#### b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- (1) Copies of notifications and reports with supporting compliance documentation;
- (2) 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;
- (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

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)]

# 9. 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 apply at all operating times and are on a 1-hour block average basis.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits	
	0.06 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(4)(c)	22	
PM	0.10 lb/MMBtu	40 C.F.R. Part 60, Subpart Db, § 60.43b(1)	0.02 lb/MMBtu *	
1 141	0.02 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)		
	11.7 lb/hr	06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)	11.7 lb/hr	
$PM_{10}$	0.02 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)	0.02 lb/MMBtu	
F1VI10	11.7 lb/hr	06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)	11.7 lb/hr	
$SO_2$	10.4 lb/hr	06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)	10.4 lb/hr	
	0.30 lb/MMBtu 24-hr block average	06-096 C.M.R. ch. 138, § (3)(B)(2)	0.15 lb/MMBtu *	
$NO_x$	0.15 lb/MMBtu 24-hr block average	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)	24-hr block average	
	87.9 lb/hr 24-hr block average	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)	87.9 lb/hr 24-hr block average	
СО	0.95 lb/MMBtu 24-hr block average	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)	0.95 lb/MMBtu 24-hr block average	
CO	556.6 lb/hr 24-hr block average	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)	556.6 lb/hr 24-hr block average	
VOC	12.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)	12.0 lb/hr	
NH <sub>3</sub>	40 ppmdv @ 12% CO <sub>2</sub>	06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)	40 ppmdv @ 12% CO <sub>2</sub>	
	15.8 lb/hr	06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)	15.8 lb/hr	
Lead	0.127 lb/hr	06-096 C.M.R. ch. 140. BPT (A-555-70-C-M, 4/25/2001) Enforceable by State-only	0.127 lb/hr	

16

#### 10. Visible Emissions

a. Visible Emissions Regulation, 060-96 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)]

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

Boiler #1 is subject to the following visible emission standard pursuant to 40 C.F.R. Part 60, Subpart Db:

Visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period of not more than 27% opacity. This standard applies at all times except for periods of startup, shutdown, and malfunction. [40 C.F.R. §§ 60.43b(f) and (g)]

c. 06-096 C.M.R. ch. 140, BPT

The Department previously established the following visible emission standard through BPT:

Except for periods of cold startup, visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average basis, except for one (1) six-minute block average per hour of not more than 27% opacity. [06-096 C.M.R. ch. 140, BPT (A-555-70-G-R, 4/15/2009)]

The Department has determined that the BPT visible emission standard is more stringent than the applicable limit in 40 C.F.R. Part 60, Subpart Db. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limit with the Federally enforceable limits in 40 C.F.R. Part 60, Subpart Db makes the BPT limit Federally enforceable.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

### 11. Cold Startup

As mentioned previously, Boiler #1 utilizes a multiclone followed by an ESP for control of particulate matter emissions. When bringing the boiler online from a cold startup, RELF utilizes a standard operating procedure that was created in accordance with manufacturer's recommendations to maintain the safety of the boiler operators and the boiler itself and to realize the expected life of the boiler. RELF also operates the ESP in accordance with good engineering practices to maintain the safety of the operators and the ESP and the control of visible emissions.

17

RELF has demonstrated to the Department that, consistent with best practical treatment requirements and other applicable standards, infrequent opacity levels in excess of the normal operating limit were unavoidable during cold startup periods.

### a. Definition of Cold Startup

For the purposes of this license, cold startup is defined as a startup when the boiler has not combusted fuel or produced measurable steam pressure for at least four (4) hours. The cold startup period begins with initial (first) fire in the boiler and ends when the steam temperature reaches 800 °F or after eight (8) hours (whichever is lesser of the two). The cold startup period may also end by removal of fire from the boiler. Another cold startup period would then begin with a subsequent first-fire.

#### b. Cold Startup Alternate Visible Emission Limits

The Department has determined that visible emissions from Boiler #1 should be deemed in compliance with visible emissions requirements during a cold startup period provided that the following requirements are satisfied:

- (1) RELF must satisfactorily prove to the Department that the period of time during which the opacity exceeded the normal operating limit was a cold startup; and
- (2) RELF must satisfactorily prove to the Department that Boiler #1 has been operated in a manner consistent with good air pollution control practices, pursuant to 40 C.F.R. Part 60.11(d), to minimize air emissions during the cold startup period.

#### c. Good Air Pollution Control Practices

The following shall constitute good air pollution control practices:

- (1) Adherence to the manufacturer's suggested standard operating procedures when lighting off the boiler from a cold condition;
- (2) Inspection, before light-off, of the mechanical dust collection system flues, hopper dust valves, and hopper inlet and outlet tubes to ensure that the

18

- equipment is free of foreign matter and testing of the dust valves prior to lightoff to ensure their proper function;
- (3) Proper operation of the mechanical dust collection system, which shall include hourly inspection of the system hopper dust valves during cold startup to ensure the valves are free of foreign matter and operate freely;
- (4) Inspection, before light-off, of the ESP and ESP dust collection system equipment to ensure that the equipment is free of foreign matter and testing of the ESP hopper dust valves and dust distribution conveyor belts prior to light-off to ensure their proper function;
- (5) Proper operation of the ESP, which shall include hourly inspection of the system hopper dust valves and dust distribution conveyor belts during cold startup to ensure the valves and belts are free of foreign matter and operate freely; and
- (6) Proper operation of the biomass feeder system to ensure that the system is achieving proper grate distribution to ensure efficient and complete combustion.

#### 12. Emission Limit Compliance Methods

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

	<b>Applicable Emission</b>		
Pollutant	Limit	Compliance Method	Frequency
	lb/MMBtu		Once every five years or
PM	lb/hr	40 C.F.R. Part 60, App. A, Method 5	more frequently if requested by the
			Department
	lb/MMBtu	40 C.F.R. Part 60, App. A,	
$PM_{10}$	lb/hr	Method 5 or EPA Test Method 201 or 201A	As requested
$SO_2$	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO <sub>X</sub>	lb/MMBtu	NO <sub>x</sub> CEMS on a 24-hour block average basis; midnight to midnight	Continuous (in accordance with 40 C.F.R. Part 60, App. B)
	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
СО	lb/MMBtu	CO CEMS on a 24-hour block average basis; midnight to midnight	Continuous (in accordance with 40 C.F.R. Part 60, App. B)
	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested

	1

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
NH <sub>3</sub>	ppmdv and lb/hr	EPA's Conditional Test Method for Ammonia (CTM-027)	Once every two calendar years (See Note 1)
Lead	lb/hr	40 C.F.R. Part 60, App. A, Method 12	As requested
Visible Emissions	% opacity	COMS on a 6-minute block average basis	Continuous (in accordance with 40 C.F.R. Part 60, App. B)

Note 1: Testing for NH<sub>3</sub> is only required if NH<sub>3</sub> is used in the boiler within the previous calendar year.

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

Exhaust gases during periods of startup, shutdown, and malfunction can have frequent periods with very high  $O_2$  readings ( $O_2$  spikes) which make emissions calculations from CEMS data inappropriate. Data from periods of high  $O_2$  (greater than 16%) in the stack gas compromises the CEMS ability to appropriately account for CO and  $NO_x$  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 limits, provided that operating records are available to demonstrate that the facility was being operated in a manner consistent with good air pollution control practice 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. Compliance Assurance Monitoring

CAM is not applicable to Boiler #1.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

### 14. Periodic Monitoring

RELF shall record data and maintain records for the following periodic monitoring values for Boiler #1 and its associated air pollution control equipment whenever the equipment is operating.

- a. Hours of operation for Boiler #1 on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
- b. Amount (tons) of wood fired in Boiler #1 on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137 and 40 C.F.R. § 60.49b(d)(2)]
- c. Amount (tons) of knots and screenings fired in Boiler #1 on an hourly, monthly, and 12-month rolling total basis; [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)]
- d. Amount (tons) of CDD fired in Boiler #1 on a daily, monthly, and 12-month rolling total basis; [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BACT (A-555-71-F-M, 1/23/1998)]
- e. Dates and times when Boiler #1 is firing CDD; [40 C.F.R. § 70.6(c)(1)]
- f. Moisture content of any biomass fired in Boiler #1; [06-096 C.M.R. ch. 137]
- g. Gallons of specification waste oil fired in Boiler #1 on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BACT (A-555-72-E-M, 3/23/1994)]
- h. Steam production measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- i. Steam temperature measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- j. Gas pressure drop across the multiclone recorded at least once per shift; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- k. Multiclone inlet and outlet gas temperature recorded at least once per shift; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 1. The number of fields energized in the ESP at any time; [40 C.F.R. § 70.6(c)(1)]
- m. ESP primary and secondary voltage recorded at least once per shift; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- n. ESP primary and secondary current recorded at least once per shift; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- o. ESP spark rate measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- p. Gas pressure drop across the ESP measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- q. ESP inlet and outlet gas temperature measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- r. Records of the calendar date, time, and duration of each cold startup; [40 C.F.R. § 70.6(c)(1)]
- s. Records of any maintenance activities performed (planned or unplanned) on Boiler #1, the multiclone, or ESP. [40 C.F.R. § 70.6(c)(1)]

#### 15. Parameter Monitors

There are no Parameter Monitors required for Boiler #1.

#### 16. CEMS and COMS

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

21

Pollutant and Continuous			
Monitors	Units	Averaging Period	Origin and Authority
NO <sub>x</sub> CEMS	ppm – converted to lb/MMBtu	24-hour block average	06-096 C.M.R. ch. 117, § 1(B)(2) and 06-096 C.M.R. ch. 138, § 3(B)(6)
O <sub>2</sub> CEMS	%	1-hour average	06-096 C.M.R. ch. 117, § 1(B)(9)
CO CEMS	ppm – converted to lb/MMBtu	24-hour block average	06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)
Opacity COMS	%	6-minute block average	40 C.F.R. § 60.48b(a)

### G. Generator #3 and Fire Pump #1

RELF operates one emergency generator (Generator #3). It is a generator set consisting of an engine and an electrical generator. Generator #3 has an engine rated at 3.7 MMBtu/hr that fires distillate fuel and was installed in 1992.

RELF operates one fire pump (Fire Pump #1). Fire Pump #1 has an engine rated at 1.6 MMBtu/hr which fires distillate fuel and was installed in 1992.

### 1. Fuel Sulfur Content

RELF is licensed to fire distillate fuel in Generator #3 and Fire Pump #1 which, by definition, has a sulfur content of 0.5% or less by weight. Pursuant to 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).

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

#### 2. New Source Performance Standards (NSPS)

Due to their dates of manufacture, neither Generator #3 nor Fire Pump #1 are subject to New Source Performance Standards (NSPS) Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII since the units were manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

### 3. 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 Generator #3 and Fire Pump #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;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

(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.

23

- (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.

Generator #3 and Fire Pump #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.

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

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)]

	Operating Limitations
Compression ignition (distillate fuel) units: Generator #3 Fire Pump #1	<ul> <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>

24

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or RELF 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

RELF 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, RELF 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

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

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

RELF 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)]

### 4. Emission Limits and Streamlining

Although emission limits for Generator #3 were originally addressed in Air Emission License A-555-72-A-N (9/5/1991), these standards have been determined to be obsolete. Emission limits for both Generator #3 and Fire Pump #1 were reestablished through BPT in Air Emission License A-555-70-L-R/A (7/31/2019).

#### a. Criteria Pollutants

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

Generator #3				
Pollutant	Applicable Emission Standards	Origin and Authority		
	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(a)		
PM	0.44 lb/hr	06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/13/2017) Enforceable by State-only		
PM <sub>10</sub> 0.44 lb/hr		06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/13/2017) Enforceable by State-only		
NO <sub>x</sub>	16.32 lb/hr	06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/13/2017) Enforceable by State-only		
$SO_2$	0.01 lb/hr	06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/13/2017) Enforceable by State-only		
СО	3.52 lb/hr	06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/13/2017) Enforceable by State-only		
VOC	1.30 lb/hr	06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/13/2017) Enforceable by State-only		

Fire Pump #1				
	<b>Applicable Emission</b>			
Pollutant	Standards	Origin and Authority		
		06-096 C.M.R. ch. 140, BPT		
PM	0.50 lb/hr	(A-555-70-L-R/A, 7/13/2017)		
		Enforceable by State-only		
		06-096 C.M.R. ch. 140, BPT		
$PM_{10}$	0.50 lb/hr	(A-555-70-L-R/A, 7/13/2017)		
		Enforceable by State-only		
		06-096 C.M.R. ch. 140, BPT		
$NO_x$	7.06 lb/hr	(A-555-70-L-R/A, 7/13/2017)		
		Enforceable by State-only		
		06-096 C.M.R. ch. 140, BPT		
CO	1.52 lb/hr	(A-555-70-L-R/A, 7/13/2017)		
		Enforceable by State-only		
		06-096 C.M.R. ch. 140, BPT		
VOC	0.56 lb/hr	(A-555-70-L-R/A, 7/13/2017)		
		Enforceable by State-only		

#### b. Visible Emissions

Generator #3 and Fire Pump #1 are each subject to 06-096 C.M.R. ch. 101.

(1) Visible emissions from each engine shall not exceed an opacity of 20% on a six-minute block average basis, except that for periods of startup during which time RELF may comply with the following work practice standards in lieu of the numerical visible emissions standard.

#### (2) Work Practice Standard

- (i) Maintain a log (written or electronic) of the date, time, and duration of all generator 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

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

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.

# 5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Generator #3 and Fire Pump #1 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

#### 6. Compliance Assurance Monitoring

CAM is not applicable to Generator #3 or Fire Pump #1.

#### 7. Periodic Monitoring

RELF shall record data and maintain records for the following periodic monitoring values for Generator #3 and Fire Pump #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; and [40 C.F.R. § 63.6655(e)]
- d. Sulfur content of the fuel fired. [06-096 C.M.R. ch. 137]

#### H. Parts Washer

RELF operates one parts washer maintained by an outside vendor on a quarterly basis. Based on the solvent used, the parts washer is subject to *Solvent Degreasers*, 06-096 C.M.R. ch. 130. Periodic monitoring for the parts washer shall consist of recordkeeping including records of solvent added and removed.

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

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

#### I. Performance Test Protocol

For any performance testing required by this license, RELF shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

The Department's Performance Testing Guidance is available online at: <a href="https://www.maine.gov/dep/air/emissions/testing.html">https://www.maine.gov/dep/air/emissions/testing.html</a>

#### J. Emission Statements

RELF is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. RELF shall maintain records sufficient to complete and submit the annual emissions statement as required by this rule.

In reporting year 2023 and every third year thereafter, RELF 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. RELF 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)]

#### **K.** 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, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- Firing Boiler #1 at 100% capacity 8760 hr/year;
- Firing 10,000 ton/year of knots and screenings;
- Limiting CDD firing to 15% (by weight) of the annual fuel use; and
- Operating Generator #3 and Fire Pump #1 for 100 hr/year each.

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.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

# **Total Licensed Annual Emissions for the Facility Tons/year**

29

(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NOx	CO	VOC	NH <sub>3</sub>	Lead
Boiler #1	51.3	51.3	45.4	384.9	2,437.9	52.6	69.2	0.6
Generator #3	_	_	_	0.8	0.2	0.1	_	_
Fire Pump #1	_	_	_	0.4	0.1	_	_	_
Total TPY	51.3	51.3	45.4	386.1	2,438.2	52.7	69.2	0.6

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

### III.AMBIENT AIR QUALITY ANALYSIS

RELF 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 licenses A-555-72-A-N, issued on 9/5/91, and A-555-77-1-A, issued 3/10/08 (CO only). An additional ambient air quality analysis is not required for this Part 70 License Renewal.

#### **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-555-70-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 RELF 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.

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

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**.

<u>Severability</u>. 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:

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

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

31

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.

### **Permit Shield Table**

Source	Citation	Description	Basis for Determination
Boiler #1	06-096 C.M.R.	Reasonably Available Control	VOC source is combustion
	ch. 134	Technology for Facilities that Emit	source and exempt pursuant
		Volatile Organic Compounds (VOC	to 06-096 C.M.R. ch. 134
		RACT)	§ (1)(C)(4).
Boiler #1	40 C.F.R. Part	Standards of Performance for Fossil-	Unit was constructed after
	60, Subpart D	Fuel-Fired Steam Generators	6/19/1986 and meets the
			applicability requirements of
			40 C.F.R. § 60.40b (a)
Boiler #1	40 C.F.R.	Standards of Performance for Electric	Fossil fuel firing capacity is
	Part 60,	Utility Steam Generating Units	less than 250 MMBtu/hour
	Subpart Da		[40 C.F.R. § 60.40Da (a)]
Boiler #1	40 C.F.R.	There is no NSPS NO <sub>x</sub> limit if the	Boiler #1 has an annual
	Subpart Db	affected facility has an annual capacity	capacity factor less than 10%
	§ 60.44b(c)	factor less than 10% for oil firing in	for oil firing.
		combination with firing wood.	
		(Boiler #1 is subject to other	
		requirements of Subpart Db.)	
Boiler #1	40 C.F.R.	Compliance Assurance Monitoring	Subject to emission limits
	Part 64		proposed after 11/15/90 and
			operating a NO <sub>x</sub> CEMS.
Fire	06-096 C.M.R.	Particulate emission limit for fuel	Unit is < 3.0 MMBtu/hr.
Pump #1	ch.103,	burning equipment > 3.0 MMBtu/hr.	
	§ 2(B)(4)(c)		

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

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

(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,

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

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.

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

- 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 <u>quarterly basis</u> if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

35

Pursuant to 38 M.R.S. § 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]

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

#### **SPECIFIC CONDITIONS**

### (14) **Boiler #1**

A. Boiler #1 shall not exceed a heat input rate of 585.9 MMBtu/hr on a 24-hour block average basis. Compliance shall be demonstrated by a steam production limit of 367,400 lb/hr. [06-096 C.M.R. ch. 115, BACT (A-555-72-D-R, 1/17/1996)]

36

- B. Emissions from Boiler #1 shall vent to Stack #1 which shall be at least 220 feet above ground level. [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- C. Ash from Boiler #1 grate, mud-drum, and fly-ash shall be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management. Ash shall be sufficiently conditioned with water or transported in covered containers so as to prevent fugitive emissions. [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]

#### D. Fuels

- Boiler #1 is licensed to fire biomass (including knots and screenings).
   [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991 & A-555-70-B-A, 4/25/2001)]
- 2. RELF shall limit the hourly feed rate of knots and screenings into Boiler #1 to 5.62 ton/hr. Compliance shall be demonstrated by records of the tons of knots and screenings mixed into the fuel blend on an hourly basis. [06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)]
- 3. RELF shall not burn more than 10,000 ton/year of knots and screenings in Boiler #1 (12-month rolling total basis). Compliance shall be demonstrated by purchase or shipping records which quantify the quantity of knots and screenings delivered. [06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)]
- 4. RELF shall modify their air emission license to address the applicable requirements of 40 C.F.R. Part 60, Subpart DDDD prior to combusting RWF in Boiler #1. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
- 5. No more than 15% (by weight) of the annual fuel use in Boiler #1 may be CDD (12-month rolling total) [06-096 C.M.R. ch. 140, BPT (A-555-70-M-A, 4/14/2020)]

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

6. Boiler #1 is licensed to fire specification waste oil generated on-site. RELF shall not fire more than 5,000 gallons of specification waste oil per year on a 12-month rolling total basis. RELF shall not combust waste oil generated off-site. [06-096 C.M.R. ch. 115, BACT (A-555-72-E-M, 3/23/1994) and 06-096 C.M.R. ch. 860]

## E. Control Equipment

1. RELF 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. 115, BACT (A-555-72-A-N, 9/5/1991)]

RELF is <u>not</u> required to operate either the SNCR or ECOTUBE systems during Boiler #1 operation provided NO<sub>x</sub> emission limits set forth in this license are met.

- 2. RELF shall control particulate matter emissions from Boiler #1 by use of a multiple cyclone separator (multiclone) followed by an ESP. [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 3. While burning only non-CDD fuels, RELF shall operate, at a minimum, the number of ESP fields in operation during the most recent stack test demonstrating compliance with licensed PM emission limits. [06-096 C.M.R. ch. 115, BACT (A-555-70-E-M, 5/27/2003)]
- 4. While burning CDD, with the exception of cold startup, RELF shall operate the 3-field ESP with all fields energized.

If a malfunction should result in loss of an ESP field or chamber at any time while combusting CDD, RELF 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-CDD fuels have been executed within this time.

RELF shall keep track of all field downtime while combusting CDD and notify the Department within 48 hours if a field goes down for over 1 ½ hours. [06-096 C.M.R. ch. 140, BPT (A-555-70-I-A, 6/12/2006 & A-555-70-G-R, 4/15/2009)] **Enforceable by State-only** 

5. Upon written notification to the Department, and in accordance with the *Bureau of Air Quality's Air Emission Compliance Test Protocol*, RELF may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall RELF be relieved of its obligation to meet its licensed emission limits. [06-096 C.M.R. ch. 140, BPT (A-555-70-A-I, 6/12/2006)] **Enforceable by State-only** 

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F. Emission Limits (Emission limits are on a 1-hour block average basis unless otherwise stated.)

**38** 

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

Pollutant	ppmdv	ppmdv Origin and Authority		
NH <sub>3</sub>	40	06-096 C.M.R. ch. 115, BACT		
	@ 12% CO <sub>2</sub>	(A-555-72-A-N, 9/5/1991)		

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

Pollutant	lb/MMBtu	Origin and Authority
PM	0.02	06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)
$PM_{10}$	0.02	06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)
NO <sub>x</sub>	0.15 24-hr block average	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)
СО	0.95 24-hr block average	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)

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

Pollutant	lb/hr	Origin and Authority
PM	11.7	06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)
$PM_{10}$	11.7	06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)
$SO_2$	10.4	06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)
NO <sub>x</sub>	87.9 24-hr block average	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)
СО	556.6 24-hr block average	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)
VOC	12.0	06-096 C.M.R. ch. 115, BACT (A-555-77-2-A, 6/15/2017)
NH <sub>3</sub>	15.8	06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)
Lead	0.127	06-096 C.M.R. ch. 115, BACT (A-555-70-C-M, 4/25/2001) Enforceable by State-only

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

#### G. Visible Emissions

Except for periods of cold startup, visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average basis, except for one (1) six-minute block average per hour of not more than 27% opacity.

39

[06-096 C.M.R. ch. 140, BPT (A-555-70-G-R, 4/15/2009)]

## H. Cold Startup

- 1. Boiler #1 shall be considered in compliance with visible emission limits during a cold startup provided the following requirements are satisfied:
  - a. Keep records which demonstrate that any period of time during which the opacity exceeded the normal operating limit met the definition in this license of cold startup; and
  - b. Comply with the following good air pollution control practices:
    - (1) Adherence to the manufacturer's suggested standard operating procedures when lighting off the boiler from a cold condition;
    - (2) Inspection, before light-off, of the mechanical dust collection system flues, hopper dust valves, and hopper inlet and outlet tubes to ensure that the equipment is free of foreign matter and testing of the dust valves prior to light-off to ensure their proper function;
    - (3) Proper operation of the mechanical dust collection system, which shall include hourly inspection of the system hopper dust valves during cold startup to ensure the valves are free of foreign matter and operate freely;
    - (4) Inspection, before light-off, of the ESP and ESP dust collection system equipment to ensure that the equipment is free of foreign matter and testing of the ESP hopper dust valves and dust distribution conveyor belts prior to light-off to ensure their proper function;
    - (5) Proper operation of the ESP, which shall include hourly inspection of the system hopper dust valves and dust distribution conveyor belts during cold startup to ensure the valves and belts are free of foreign matter and operate freely;
    - (6) Proper operation of the biomass feeder system to ensure that the system is achieving proper grate distribution to ensure efficient and complete combustion; and
    - (7) Maintain an inspection log documenting compliance with (1) (7) above. [06-096 C.M.R. ch. 140, BPT (A-555-70-G-R, 4/15/2009)]
- 2. RELF shall maintain a cold startup record that shall include the dates and times of all cold startups, documentation of all six-minute block averages that exceed 20%

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

opacity, and records of the pre-light-off inspections of the mechanical dust collection system, the ESP, and the biomass feeder system. [06-096 C.M.R. ch. 140, BPT (A-555-70-G-R, 4/15/2009)]

40

- 3. RELF shall continuously monitor, record once per hour, and include in the cold startup record the following surrogate parameter values during cold startup:
  - a. Surface metal temperature of the steam drum;
  - b. Steam pressure;
  - c. Economizer inlet gas temperature;
  - d. ESP inlet and outlet gas temperatures;
  - e. ESP exit gas oxygen content via CEMS;
  - f. Primary and secondary voltages on each field of the ESP;
  - g. Primary and secondary currents on each field of the ESP;
  - h. ESP hopper dust valve condition; and
  - i. Mechanical dust collection system hopper dust valve condition. [06-096 C.M.R. ch. 140, BPT (A-555-70-G-R, 4/15/2009)]
- 4. RELF shall submit a copy of the cold startup record to the Department within the quarterly emission report. [06-096 C.M.R. ch. 140, BPT (A-555-70-G-R, 4/15/2009)]

#### I. Compliance Methods

Compliance with the emission limits associated with Boiler #1 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department. [06-096 C.M.R. ch. 140]

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
DM	lb/MMBtu	40 C.F.R. Part 60, App. A,	Once every five years or more frequently if
PM	lb/hr	Method 5	requested by the Department
	lb/MMBtu	40 C.F.R. Part 60, App. A,	•
$PM_{10}$	lb/hr	Method 5 or EPA Test Method 201 or 201A	As requested
$SO_2$	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
NOx	lb/MMBtu NO <sub>x</sub> CEMS on a 24-hour block average basis; midnight to midnight		Continuous (in accordance with 40 C.F.R. Part 60, App. B)
	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
СО	lb/MMBtu	CO CEMS on a 24-hour block average basis; midnight to midnight	Continuous (in accordance with 40 C.F.R. Part 60, App. B)
	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
NH <sub>3</sub>	ppmdv and lb/hr	EPA's Conditional Test Method for Ammonia (CTM-027)	Once every two calendar years (See Note 1)
Lead	lb/hr	40 C.F.R. Part 60, App. A, Method 12	As requested
Visible Emissions	% opacity	COMS on a 6-minute block average basis	Continuous (in accordance with 40 C.F.R. Part 60, App. B)

41

Note 1: Testing for NH<sub>3</sub> is only required if NH<sub>3</sub> is used in the boiler within the previous calendar year.

### J. 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:

1. RELF shall prepare and submit to the Department and EPA an Excess Emissions report 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)]

Excess emissions are defined as all six-minute periods during which the average opacity exceeds the standard. [40 C.F.R. § 60.49b(h)]

2. At all times, including periods of startup, shutdown, and malfunction, RELF shall, to the extent practicable, maintain and operate Boiler #1 and its associated air pollution control equipment in a manner consistent with good air pollution control practice 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. [40 C.F.R. § 60.11(d)]

### 42

K. 40 C.F.R. Part 63, Subpart JJJJJJ

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

1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

a. 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	Every 5 years
(Boiler #1)	

[40 C.F.R. § 63.11223(a) and Table 2]

- b. 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, <u>as applicable</u>, 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, <u>as applicable</u>, 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)]

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

- c. <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and submitted to the Department and/or EPA upon request. 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)]

## 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)]

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. 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;
- d. 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. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:
  - a. Copies of notifications and reports with supporting compliance documentation;

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

b. 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;

44

- c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review.

## L. Periodic Monitoring

RELF shall record data and maintain records for the following periodic monitoring values for Boiler #1 and its associated air pollution control equipment whenever the equipment is operating.

- 1. Hours of operation for Boiler #1 on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
- 2. Amount (tons) of wood fired in Boiler #1 on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137 and 40 C.F.R. § 60.49b(d)(2)]
- 3. Amount (tons) of knots and screenings fired in Boiler #1 on an hourly, monthly, and 12-month rolling total basis; [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BACT (A-555-70-B-A, 4/25/2001)]
- 4. Amount (tons) of CDD fired in Boiler #1 on a daily, monthly, and 12-month rolling total basis; [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BACT (A-555-71-F-M, 1/23/1998)]
- 5. Dates and times when Boiler #1 is firing CDD; [40 C.F.R. § 70.6(c)(1)]
- 6. Moisture content of any biomass fired in Boiler #1; [06-096 C.M.R. ch. 137]
- 7. Gallons of specification waste oil fired in Boiler #1 on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BACT (A-555-72-E-M, 3/23/1994)]
- 8. Steam production measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 9. Steam temperature measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 10. Gas pressure drop across the multiclone recorded at least once per shift; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 11. Multiclone inlet and outlet gas temperature recorded at least once per shift; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 12. The number of fields energized in the ESP at any time; [40 C.F.R. § 70.6(c)(1)]
- 13. ESP primary and secondary voltage recorded at least once per shift; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 14. ESP primary and secondary current recorded at least once per shift; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 15. ESP spark rate measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]

## Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

- 16. Gas pressure drop across the ESP measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]
- 17. ESP inlet and outlet gas temperature measured and recorded continuously; [06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)]

45

- 18. Records of the calendar date, time, and duration of each cold startup; [40 C.F.R. § 70.6(c)(1)]
- 19. Records of any maintenance activities performed (planned or unplanned) on Boiler #1, the multiclone, or ESP. [40 C.F.R. § 70.6(c)(1)]

#### M. CEMS and COMS

1. RELF 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:

Pollutant and Continuous	TI •		
Monitors	Units	Averaging Period	Origin and Authority
NO <sub>x</sub> CEMS	ppm – converted to lb/MMBtu	24-hour block average	06-096 C.M.R. ch. 117, § 1(B)(2) and 06-096 C.M.R. ch. 138, § 3(B)(6)
O <sub>2</sub> CEMS	%	1-hour average	06-096 C.M.R. ch. 117, § 1(B)(9)
CO CEMS	ppm – converted to lb/MMBtu	24-hour block average	06-096 C.M.R. ch. 115, BACT (A-555-72-A-N, 9/5/1991)
Opacity COMS	%	6-minute block average	40 C.F.R. § 60.48b(a)

- 2. The span value for the COMS shall be between 60 and 80 percent. [40 C.F.R. § 60.48b(e)(1)]
- 3. For periods of boiler 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, RELF may identify the event, as appropriate (as 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-555-70-G-R, 4/15/2009)]

### (15) Generator #3 and Fire Pump #1

A. Generator #3 and Fire Pump #1 are licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/31/2017)] **Enforceable by State-only** 

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

#### B. Fuel Sulfur Content

- 1. The fuel oil sulfur content of the distillate fuel fired in Generator #3 and Fire Pump #1 shall be limited to 0.0015% sulfur by weight. [06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/31/2017)] **Enforceable by State-only**
- 2. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
- C. Emissions shall not exceed the following limits:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #3	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

D. Emissions shall not exceed the following limits: [06-096 C.M.R. ch. 140, BPT (A-555-70-L-R/A, 7/31/2017)] **Enforceable by State-only** 

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #3	0.44	0.44	0.01	16.32	3.52	1.30
Fire Pump #1	0.50	0.50	_	7.06	1.52	0.56

#### E. Visible Emissions

Visible emissions from Generator #3 and Fire Pump #1 shall each not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time RELF may comply with the following work practice standards in lieu of the numerical visible emissions standard. [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 generator startups.
- 2. Operate Generator #3 and Fire Pump #1 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.

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

- 4. Operate Generator #3 and Fire Pump #1, 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.
- F. Generator #3 and Fire Pump #1 shall each meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:
  - 1. RELF shall meet the following operational limitations for each of the compression ignition emergency engines (Generator #3 and Fire Pump #1):
    - 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. § 63.6603(a) and Table 2(d); and 06-096 C.M.R. ch. 140, BPT]

2. Oil Analysis Program Option

RELF 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, RELF 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)]

- 3. Non-Resettable Hour Meter A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]
- 4. 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

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

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. RELF 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)]

## 5. Operation and Maintenance

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or RELF 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)]

6. 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 2d]

#### G. Periodic Monitoring

RELF shall record data and maintain records for the following periodic monitoring values for Generator #3 and Fire Pump #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; and [40 C.F.R. § 63.6655(e)]
- 4. Sulfur content of the fuel fired. [06-096 C.M.R. ch. 137]

## (16) Parts Washer

The Parts Washer at RELF is subject to Solvent Cleaners, 06-096 C.M.R. ch. 130.

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

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

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

49

- 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. RELF 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. The 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]

## (17) Fugitive Emissions

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

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

### (18) General Process Sources

Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

**50** 

## (19) **Performance Test Protocol**

For any performance testing required by this license, RELF shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only** 

## (20) **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

### (21) Quarterly Reporting

The licensee shall submit a Quarterly Report to the Department 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 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;

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

3. Amount of air contaminant emitted in excess of the applicable emission standard, expressed in the units of the standard;

51

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

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

Note: This semiannual report is separate from, and in addition to, any semiannual report required by specific NSPS or NESHAP regulations.

- A. The licensee shall submit to the Department 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 on or 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. 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.

### (23) Annual Compliance Certification

RELF 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 on or 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]

# Departmental Findings of Fact and Order Part 70 Air Emission License Renewal

## (24) Annual Emission Statements

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, RELF 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.

52

B. In reporting year 2023 and every third year thereafter, RELF shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). RELF shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

## (25) General Applicable State Regulations

The licensee is subject to the State regulations listed below.

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

### (26) 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]

### (27) Asbestos Abatement

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

### (28) Expiration of a Part 70 license

- A. RELF 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

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

53

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** 

## (29) New Source Review

RELF is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emission license, and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emissions License, A-555-70-N-R, expires.

Done and dated in Augusta, maine this  $9^{th}$  day of MAY, 2022.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

MELANIE LOYZIM, 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.]

for

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/18/2021
Date of application acceptance: 10/19/2021

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

## **FILED**

MAY 09, 2022

State of Maine Board of Environmental Protection