| | |
|---|---|
| **Pixelle Androscoggin LLC**<br>**Franklin County**<br>**Jay, Maine**<br>**A-718-70-F-R/A** | **Departmental**<br>**Findings of Fact and Order**<br>**Part 70 Air Emission License**<br>**Renewal and Amendment** |

## FINDINGS OF FACT

After review of the Part 70 License renewal and amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

## I. REGISTRATION

### A. Introduction

| | |
|---|---|
| FACILITY | Pixelle Androscoggin LLC |
| LICENSE TYPE | Part 70 License Renewal<br>Part 70 Significant License Modification |
| NAICS CODES | 221112 |
| NATURE OF BUSINESS | Fossil Fuel Power Generation |
| FACILITY LOCATION | Gate 15, 300 Riley Road, Jay, Maine |

Pixelle Androscoggin LLC (Pixelle Cogen or Cogen) is a fossil fuel firing electric power generation facility which provides steam to the Pixelle Androscoggin LLC pulp and paper mill in Jay, Maine, and electricity to the utility grid. Pixelle Cogen is located at 300 Riley Road through Gate 15 of the pulp and paper mill property in the town of Jay, Maine. The facility operates three identical cogeneration trains, which include combustion turbines (CT) and heat recovery steam generators (HRSG). Natural gas is the primary fuel for the combustion turbines, with ultra-low sulfur distillate fuel with a maximum sulfur content of 0.0015% by weight being used as a secondary fuel. Emissions from the facility are from the combustion of natural gas and distillate fuel in the three CT units and from the combustion of natural gas in the three HRSG duct burners and two glycol system heaters.

Pixelle Cogen has the potential to emit more than 100 tons per year (tpy) of particulate matter (PM), particulate matter under 10 micrometers ($PM_{10}$), particulate matter under 2.5 micrometers ($PM_{2.5}$), nitrogen oxides ($NO_x$), carbon monoxide (CO), and more than 100,000 tpy of carbon dioxide equivalent ($CO_2e$); therefore, the source is classified as a major source for criteria pollutants.

Pixelle Cogen has the potential to emit 10 tpy or more of a single hazardous air pollutant (HAP) or 25 tpy or more of combined HAP in their combustion emissions; therefore, the source is classified as a major source for HAP.

This facility was first licensed in 1998 with Air Emission License A-718-71-A-N, and the initial Part 70 license (A-718-70-A-I) was issued July 30, 2003.

## B. Emission Equipment

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

**Fuel Burning Equipment**

| Equipment | Maximum *for Each Unit*: Heat Input Capacity | Maximum *for Each Unit*: Firing Rate and Fuel Type | Manuf. Date | Install. Date | Stack # |
|---|---|---|---|---|---|
| Combustion Turbine #1 | 675 MMBtu/hr each | 661,764 scf/hr Natural Gas (primary fuel); 4,927 gal/hr Distillate Fuel (0.0015% sulfur, secondary fuel) | 1999 | 1999 | 1 |
| Combustion Turbine #2 | | | | | 2 |
| Combustion Turbine #3 | | | | | 3 |
| Heat Recovery Steam Generator #1 | 304 MMBtu/hr each | 298,039 scf/hr Natural Gas | 1999 | 1999 | 1 |
| Heat Recovery Steam Generator #2 | | | | | 2 |
| Heat Recovery Steam Generator #3 | | | | | 3 |
| Glycol System Heater #1 | 3.05 MMBtu/hr each | 2,990 scf/hr Natural Gas | 1999 | 1999 | 4 |
| Glycol System Heater #2 | | | | | 5 |

**Process Equipment**

| Equipment | Capacity | Contents |
|---|---|---|
| Oil Storage Tank #1 | 350,000 gallons | Distillate Fuel |

Pixelle Cogen 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 |
| $CO_2e$ | Carbon Dioxide equivalent |
| COMS | Continuous Opacity Monitoring System |
| EPA or US EPA | United States Environmental Protection Agency |
| gal/hr | gallon per hour |
| GHG | Greenhouse Gases |
| HAP | Hazardous Air Pollutants |
| lb/hr | pounds per hour |
| lb/MMBtu | pounds per million British Thermal Units |
| M.R.S. | Maine Revised Statutes |
| MMBtu/hr | million British Thermal Units per hour |
| NESHAP | National Emissions Standards for Hazardous Air Pollutants |
| $NO_x$ | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| NSR | New Source Review |
| $O_2$ | Oxygen |
| PM | Particulate Matter less than 100 microns in diameter |
| $PM_{10}$ | Particulate Matter less than 10 microns in diameter |
| $PM_{2.5}$ | Particulate Matter less than 2.5 microns in diameter |
| ppmdv | parts per million on a dry volume basis |
| $SO_2$ | Sulfur Dioxide |
| tpy | ton per year |
| VOC | Volatile Organic Compounds |

## D. Definitions

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

## E. Application Classification

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

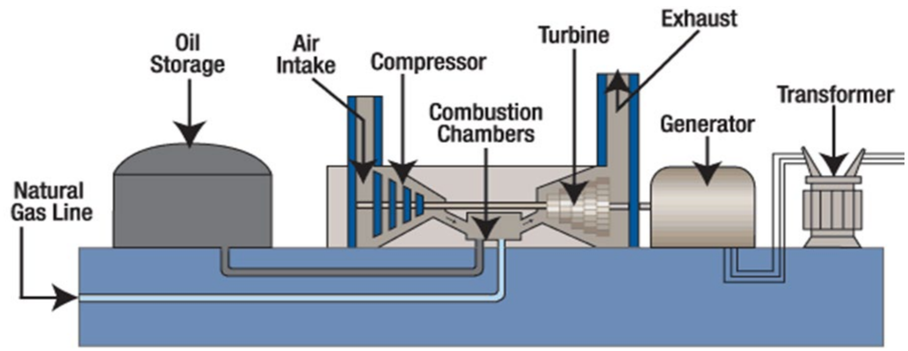
The application for Pixelle Cogen is for the renewal of their existing Part 70 License and incorporation of subsequent Part 70 amendments, pursuant to Section 2(A) of *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

Pixelle Cogen has also requested incorporation into the Part 70 License the relevant terms and conditions of the New Source Review (NSR) license issued to Pixelle Cogen pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115, A-718-77-2-A issued March 2, 2018. Therefore, the license is considered to be a Part 70 License renewal with a Part 70 Significant License Modification for the incorporation of NSR requirements.

## F. Facility Description

Pixelle Cogen operates a cogeneration system to supply energy in the form of steam to the Pixelle Androscoggin pulp and paper mill in Jay, Maine, and to produce electricity for the utility grid. This cogeneration facility is located within the Pixelle Androscoggin mill property boundary.

The facility consists of three cogeneration trains consisting of a combustion turbine and a heat recovery steam generator, similar to the diagram below.



1. Combustion Turbines #1, #2 and #3

Combustion turbines (CT) are designed to start quickly to meet the demand for steam and/or electricity during peak demand periods. The CT are dual fuel units that fire pipeline natural gas as their primary fuel, with the ability to fire ultra-low sulfur distillate fuel (0.0015% sulfur by weight) from an on-site 350,000 gallon storage tank as a secondary fuel. The maximum design heat input capacity of each CT is 675 MMBtu per hour. Each of the CT utilize dry low $NO_x$ burner technology to provide low emissions without the use of water injection in the combustion chamber when firing natural gas. Water injection is used as $NO_x$ control in the CT during the combustion of distillate fuel. Further emission reductions are obtained by employing a Selective Catalyst Reduction (SCR) and an Aqueous Ammonia injection grid during the combustion of natural gas in the CT. The SCR cannot be placed in service during distillate fuel combustion. A carbon monoxide (CO) catalyst is utilized to reduce CO emissions significantly below permitted levels.

The turbines draw ambient air in at the front of the unit where it is compressed, mixed with fuel and ignited. Ignition of the air-fuel mixture causes it to expand which turns the turbine rotor as the gases pass through the turbine blades toward the lower pressure zone of the turbine. The turbine rotor is coupled to a generator, which produces electricity when driven by combustion turbine. Each generator is capable of producing up to 50 MW of electricity, depending on ambient conditions.

The output of a CT is largely dependent on the mass throughput of combustion air admitted into the front end of the CT. During colder months, the CT can approach their rated capacities due to the higher density of the cold combustion air that mixes with the fuel being fired. Combustion air with a higher density contains more mass, which both permits higher quantities of fuel to be fired and has a greater capacity to drive the CT.

During months where outdoor ambient air temperatures reach or exceed 50° F, the ambient air is less dense and results in lower mass flow rates of combustion air entering the CT. This results in lower efficiency and lower achievable energy outputs from the CT available to drive the generators.

In 2018, Cogen installed a wet compression system[1] on the inlet of CT #1 to promote higher electrical generation capacity during warmer months. The wet compression system injects micron size water droplets into the inlet of the CT (prior to the combustion chamber) where it mixes with the combustion air and reduces its temperature, thus increasing its density. The higher volume of cooler, denser combustion air permits a higher fuel firing rate in the CT, which results in a higher capacity to generate electricity.

---

[1]A wet compression system is different than a water injection system. A wet compression system is used solely to increase the CT output capacity by densifying the incoming combustion air, while a water injection system is used as an emission control by reducing combustion gas temperatures and thus inhibiting the formation of thermal $NO_x$.

2. Heat Recovery Steam Generators #1, #2 and #3

Combustion gases from each CT exhaust to its own heat recovery steam generator (HRSG), where residual energy in the turbine exhaust gases is used to produce steam. Low $NO_x$ duct burners installed in the HRSG fire pipeline natural gas and serve as a supplemental heat source for the HRSG during periods of increased steam demand. Each HRSG unit has a maximum design heat input capacity of 304 MMBtu per hour. Each cogeneration train (CT and HSRG) exhausts into its own dedicated stack that is monitored by a discrete continuous emissions monitoring system (CEMS).

High and intermediate pressure steam from the HRSG is sent to the adjacent pulp and paper mill; low pressure steam is used for HRSG feedwater deaeration and other internal process functions of the cogeneration trains. Although Cogen does not currently operate a steam turbine within their facility, excess steam developed in the HRSG could theoretically drive a steam turbine to produce additional power, should the facility choose to install one in the future.

3. Glycol System Heaters #1 and #2

In addition to the cogeneration trains, Cogen also operates two (2) natural gas-fired Glycol System Heaters. The heaters have a maximum heat input of 3.05 MMBtu per hour each and are used to preheat the natural gas fired in the equipment. The Glycol System Heaters only run when the CT are operating.

## G. General Facility Requirements

Pixelle Cogen 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 | Applicable Units |
|---|---|---|
| 06-096 C.M.R. ch. 101 | Visible Emissions Regulation | Facility |
| 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. 140 | Part 70 Air Emission License Regulations | |

| Citation | Requirement Title | Applicable Units |
|---|---|---|
| 06-096 C.M.R. ch. 143 | New Source Performance Standards | Facility |
| 06-096 C.M.R. ch. 144 | National Emission Standards for Hazardous Air Pollutants | |
| 06-096 C.M.R. ch. 156 | $CO_2$ Budget Trading Program | |
| 40 C.F.R. Part 60, Subpart Db | Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units | HRSG #1, #2 and #3 |
| 40 C.F.R. Part 60, Subpart GG | Standards of Performance for Stationary Gas Turbines | CT #1, #2 and #3 |
| 40 C.F.R. Part 63, Subpart DDDDD | National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters | Glycol System Heaters #1 and #2 |
| 40 C.F.R. Part 68 | Chemical Accident Prevention Provisions | Facility |
| 40 C.F.R. Part 70 | State Operating Permit Programs | |
| 40 C.F.R. Part 72 | Permits Regulation (Acid Rain) | |
| 40 C.F.R. Part 75 | Continuous Emissions Monitoring | |

## 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 emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

As summarized in the facility's initial license as Best Available Control Technology (BACT) and subsequent license as BPT, the air pollution control technologies identified in the table below are employed for the cogeneration trains.

| Unit | Pollutant | Control Strategy |
|---|---|---|
| CT | $NO_x$ | Water Injection (while firing distillate fuel) |
| | | Dry low $NO_x$ combustors |
| HRSG | $NO_x$ | Low $NO_x$ burners |
| CT and HRSG | $NO_x$ | Selective Catalytic Reduction and Aqueous Ammonia Injection, during natural gas firing only |
| | $SO_2$ | Combustion of low sulfur fuels |
| | CO | Carbon Monoxide Catalyst, good combustion practices |
| | PM, $PM_{10}$ | Good combustion practices, combustion of clean fuels |
| | VOC | Carbon Monoxide Catalyst, good combustion practices |

Each of the three cogeneration trains consists of a CT which exhausts directly into a HRSG, which in turn, exhausts to a stack. Some state and federal standards and requirements are applicable to only the CT, others apply only to the HRSG, while additional ones are applicable to both the CT and HRSG together (cogeneration train). Specific requirements for each grouping of equipment are identified later in these Findings of Fact.

**B. Acid Rain**

Pixelle Cogen CT #1, #2, and #3 are subject to the federal Acid Rain Program, *State Operating Permits Program,* 40 C.F.R. Part 70, and *Permits Regulation,* C.F.R. Part 72; therefore, the facility is required to have a Phase II acid rain permit. Pixelle Cogen was issued an acid rain permit, A-718-70-A-S, on November 12, 1998.

**C. $CO_2$ Budget Source**

Pixelle Cogen was issued license A-718-78-A-N, issued January 15, 2009, per Maine's *$CO_2$ Budget Trading Program*, 06-096 C.M.R. ch. 156 for CT #1, #2, and #3.

**D. NESHAP Part 63, Subpart DDDDD**

Because Cogen is a major source of HAP emissions, some emission units at the facility are subject to the requirements of the federal regulation 40 C.F.R. Part 63, Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.* This regulation establishes emissions limitations and work practice standards governing HAP emissions from units located at major sources of HAP, for each unit which falls into one of the subcategories listed under "Types of Boilers and Process Heaters" in 40 C.F.R. § 63.7499. The requirements of Subpart DDDDD applicable to boilers and process heaters at this facility are addressed specifically in the appropriate equipment section of this license.

## E. Compliance Assurance Monitoring

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

However, 40 C.F.R. § 64.2(b)(1)(vi) also allows the exemption from specific CAM requirements for any emission unit that is subject to emission limitations or standards for which a Part 70 air emission license specifies a continuous compliance determination method. The original BACT determination for the cogeneration trains included emission limitations that were to be monitored by the installation and operation of several CEMS, including $NO_x$ and CO, on the exhaust from each of the Cogeneration Trains #1, #2, and #3. [A-718-71-A-N (March 31, 1998)]

Since the original BACT determination in Pixelle Cogen's Part 70 license in part requires the operation of a CEMS to continuously demonstrate compliance with $NO_x$ and CO emission limits, CAM requirements do not apply to these units. [40 C.F.R. § 64.2(b)(1)(vi)]

## F. $NO_x$ RACT (Reasonably Available Control Technology)

*Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides,* 06-096 C.M.R. ch. 138 ($NO_x$ RACT) is applicable to sources that have the potential to emit quantities of $NO_x$ equal to or greater than 100 tons/year, and was an existing source when rule went into effect on August 3, 1994.

The Cogen facility was originally owned and constructed by Androscoggin Energy LLC, who submitted an application to license this facility as a new major source on September 12, 1997. Because Cogen was not an existing stationary source when the $NO_x$ RACT rule went into effect in 1994, the facility is not subject to its requirements.

## G. Facility Fuel Oil Use

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

Periodic monitoring for fuel oil use shall include recordkeeping to document fuel use both on a monthly and a 12-month rolling total basis. Documentation shall include the type and quantity of fuel used, and the sulfur content of the fuel.

## H. Risk Management Plan

Federal regulation 40 C.F.R Part 68, *Chemical Accident Prevention Provisions*, contains requirements for facilities that use specific regulated substances over threshold limits in a process. These requirements are designed to prevent the accidental release of the regulated substances.

Pixelle Cogen stores aqueous ammonia at concentrations higher than 20% and in quantities over 20,000 lbs. for use in conjunction with their SCR for $NO_x$ control and are therefore subject to the requirements of Part 68.

## I. Combustion Turbines #1, #2, and #3

Combustion Turbines (CT) #1, #2, and #3 are each Westinghouse Model number 251B12, dual-fueled units, each with eight burners firing pipeline natural gas as the primary fuel and ultra-low sulfur (0.0015% by weight) distillate fuel as secondary fuel. The maximum design heat input capacity of each CT is 675 MMBtu per hour. Each CT is coupled with a brush electric generator capable of producing up to 50 MW, depending on ambient conditions. The CT units were all manufactured and installed in 1999.

Emissions from the CT units exhaust through three closely grouped stacks. Each of these stacks has an inside diameter of 153 inches and a height of 212 feet above ground level (AGL).

1. Federal Regulations

   a. New Source Performance Standards (NSPS)

      *(1) NSPS 40 C.F.R. Part 60, Subpart KKKK*
      Because the three CT were installed in 1999, they are not subject to New Source Performance Standards (NSPS) 40 C.F.R. Part 60, Subpart KKKK – *Standards of Performance for Stationary Combustion Turbines,* which is applicable to stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

      *(2) NSPS 40 C.F.R. Part 60, Subpart GG*
      The three CT are subject to NSPS 40 C.F.R. Part 60, Subpart GG – *Standards of Performance for Stationary Gas Turbines*, for which construction is commenced after October 3, 1977.

      Pursuant to 40 C.F.R. § 60.333, $SO_2$ emissions are limited to either:

      (a) 0.015% by volume @ 15% $O_2$ on a dry basis; or

      (b) the fuel sulfur content shall not exceed 0.8% by weight.

      Pursuant to 40 C.F.R. § 60.332(a)(1), $NO_x$ is limited based on the following equation:

STD = (0.0075) x (14,4/Y ) + F, where:

STD is the allowable $NO_x$ emissions (percent by volume at 15% $O_2$ on a dry basis);

Y is a function of the manufacturer's rated load (kilojoules per watt-hour);

and

F is a function of the fuel-bound nitrogen.

Subpart GG requires affected facilities to monitor the fuel-bound nitrogen and sulfur content of the fuel that is fired in combustion turbines. As of October 6, 2000, EPA approved an alternative monitoring schedule; therefore, Cogen shall perform all monitoring in accordance with 40 C.F.R. Part 60, Subpart GG and the February 1999 letter submitted to EPA.

Subpart GG allows that the monitoring of the sulfur content of a gaseous fuel is not required when the gaseous fuel is determined to meet the definition of natural gas, including a limit of 20.0 grains of sulfur per 100 scf of "as delivered" fuel [40 C.F.R. § 60.334(h)(3)]. Therefore, sulfur content monitoring of fuel oil shall be conducted in accordance with the alternative fuel monitoring schedule approved by the Department and EPA.

Monitoring of nitrogen content in natural gas and fuel oil is not required in accordance with the Department's letter of approval dated October 17, 2001. Subpart GG requires Pixelle Cogen to continuously monitor and record the fuel consumption and the ratio of water to fuel being fired. However, in a letter dated February 20, 2001, EPA approved the use of $NO_x$ CEMS as an alternative method to monitor $NO_x$ emissions rather than continuously monitoring and recording the water-to-fuel ratio.

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

Federal regulation 40 C.F.R. Part 63, Subpart YYYY, *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*, establishes national emission limitations and operating limitations for hazardous air pollutant (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations. These units are considered existing stationary combustion turbines because their construction was commenced on or before January 14, 2003 [40 C.F.R. § 63.6090(a)(1)]. Therefore, according to 40 C.F.R. § 63.6090(b)(4), CT #1, #2, and #3 are not subject to the requirements of Subpart YYYY or Subpart A. The CT units would only become subject to Subpart YYYY in the event they are reconstructed as defined in 40 C.F.R. § 63.2.

2. Control Equipment

The CT are equipped with advanced, dry low $NO_x$ burner technology to achieve low $NO_x$ emissions without the use of water injections into the combustion chamber when firing natural gas. Water injection into the combustion chamber is used as $NO_x$ control during the combustion of ultra-low sulfur distillate fuel, with the water providing a heat sink that lowers the temperature inside the combustion chamber, thereby reducing thermal $NO_x$ formation. Further emission reductions are obtained using a Selective Catalyst Reduction (SCR) and Aqueous Ammonia injection grid during the combustion of natural gas. The combination of dry low $NO_x$ Burners and SCR reduce $NO_x$ emissions from the CT to below 4.5 ppm.

The SCR system is utilized to reduce $NO_x$ emissions from the CT during natural gas firing but not during distillate fuel firing.

3. Emission Limits Specific to CT #1, #2 and #3

Emission standards specifically applicable to CT#1, #2, and #3 alone, along with the origin and authority of each standard are presented here.

| Pollutant | Applicable Standards | Origin and Authority |
|---|---|---|
| PM | 0.06 lb/MMBtu firing oil, gas or petroleum products | 06-096 C.M.R. ch. 103 (2)(B)(1)(c) |
| | 6.27 lb/hr firing natural gas | A-718-71-A-N (March 31, 1998), BACT |
| | 24.21 lb/hr firing distillate fuel | |
| $PM_{10}$ | 6.27 lb/hr firing natural gas | A-718-71-A-N (March 31, 1998), BACT |
| | 24.21 lb/hr firing distillate fuel | |
| $SO_2$ | $SO_2$ emissions shall be ≤ 0.015% by volume @ 15% $O_2$ on a dry basis, or fuel sulfur content shall not exceed 0.8% by weight | 40 C.F.R. § 60.333 |
| | 1.35 lb/hr firing natural gas | A-718-71-A-N (March 31, 1998), BACT |
| | 1.04 lb/hr firing distillate oil | 06-096-C.M.R. ch. 115, BPT; 38 M.R.S.A. § 603-A(2)(A)(3) |
| Visible Emissions | 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, malfunction, or certain equipment maintenance, during which times the unit operator may elect to comply with the work practice standards of sections 4(A) or 4(C) of 06-096 C.M.R. ch. 101. | 06-096 C.M.R. ch. 101 (3)(A)(6) |
| | 20% opacity, on a six-minute block average basis, except for one six-minute block per hour of not more than 27% opacity. | A-718-71-A-N (March 31, 1998), BACT |

4. Distillate Fuel Use Limit

The sulfur content of the distillate fuel fired in the CT at Pixelle Cogen shall not exceed the maximum allowable limit of 0.0015% by weight.

As previously licensed, Pixelle Cogen shall not exceed a combined total of 11,180,000 gallons of distillate fuel fired in the three combustion turbines. This fuel cap limits the heat input from distillate fuel fired in the three CT to less than 10% of their annual heat input capacity; thus, for purposes of the Acid Rain Program and of 40 C.F.R. Part 75, these units are considered gas-fired combustion turbines. At any time that a gas-fired CT fires distillate fuel in quantities that preclude it from meeting the definition of "gas-fired" as prescribed in 40 C.F.R. § 72.2, Pixelle Cogen shall notify the Department in writing within 30 days. The CT would be considered an existing distillate fuel-fired CT and would be subject to all applicable state rules and federal regulations for distillate fuel-fired CTs.

This fuel cap also serves to prevent Pixelle Cogen from being a major source of VOC.

## J. Heat Recovery Steam Generators (HRSG) #1, #2, and #3

HRSG #1, #2, and #3 are steam generators associated with CT #1, #2, and #3, each equipped with a duct burner with a rated heat input capacity of 304 MMBtu per hour firing pipeline natural gas. The HRSG are triple-pressure units providing high pressure and intermediate pressure steam primarily to the steam headers at the Pixelle pulp and paper mill. Some of this steam is also used for water/steam injection into the combustion turbines. Low-pressure steam generated in the HRSG is used primarily for HRSG feedwater deaeration and other internal functions of the cogeneration train.

1. Federal Regulations

a. New Source Performance Standards (NSPS)

*(1) NSPS 40 C.F.R. Part 60, Subpart D*
The units HSRG #1, #2, and #3 are not subject to NSPS requirements of 40 C.F.R. Part 60, Subpart D – *Standards of Performance for Fossil Fuel Fired Steam Generators* because they meet the applicability requirements of paragraph (a) of §60.40b of 40 C.F.R. Part 60, Subpart Db. [40 C.F.R. § 60.40b(j)]

*(2) NSPS 40 C.F.R Part 60, Subpart Da*
The HSRG units are not subject to NSPS 40 C.F.R. Part 60, subpart Da - *Standards of Performance for Electric Utility Steam Generating Units*, for which construction commenced after September 18, 1978, on the following basis: For each HSRG, no more than 33% of the potential electric output capacity, and less than 25 MW electrical output will be supplied to any utility power distribution system for sale. If Pixelle Cogen should install a steam

turbine in the future or if changes in the operating configuration cause these values to exceed the 33% and 25 MW thresholds, the facility may become subject to Subpart Da. Although they are not currently subject to Subpart Da, compliance with the conditions of this license also demonstrates compliance with the requirements of that Subpart.

(3) <u>*NSPS 40 C.F.R. Part 60, Subpart Db*</u>

The HRSG units are subject to 40 C.F.R. Part 60, Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, which commence construction, modification, or reconstruction after June 19, 1984, and have heat input capacities of greater than 100 MMBtu per hour.

Contained in 40 C.F.R. Part 60, Subpart Db, are emission limits, compliance and performance test specifications, emission monitoring requirements, and reporting and recordkeeping requirements for emissions of $SO_2$, PM, and $NO_x$ from affected facilities. Requirements pertaining to each pollutant are specified here.

| **Pollutant** | **Applicable Emission Limit Determination** | **Basis for Determination** |
|---|---|---|
| $SO_2$ | Because Pixelle Cogen combusts only natural gas in the HRSG units, they are exempt from the $SO_2$ emissions of this Subpart. | 40 C.F.R. Part 60, Subpart Db, § 60.42b(k)(2) |
| PM | There is no PM emission limit specified in this Subpart for affected units firing only natural gas. | 40 C.F.R. Part 60, Subpart Db, § 60.43b |
| $NO_x$ | Limit of 0.20 lb/MMBtu | 40 C.F.R. Part 60, Subpart Db, § 60.44b(I)(1) |

The $NO_x$ emission standard applies at all times. Compliance with the $NO_x$ emission standard shall be demonstrated by use of CEMS specified under § 60.48b for measuring $NO_x$ and $O_2$ and meeting the requirements of § 60.48b. [40 C.F.R. Part 60, Subpart Db, § 60.46b(f)(2)]

Because Pixelle Cogen combusts only natural gas in the HRSG units, 40 C.F.R. Part 60, Subpart Db does not impose emission limit requirements in addition to those described above.

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

Federal regulation 40 C.F.R. Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* is applicable to industrial boilers or process heaters as defined in that Subpart and located at or are a part of a major source of HAP. According to § 63.7575 of Subpart DDDDD, waste heat boilers (which, according to the rule, are also referred to as heat recovery steam generators) are excluded from the definition of *boiler*.

Therefore, Subpart DDDDD is not applicable to HRSG units #1, #2, or #3 at the Pixelle Cogen facility. [40 C.F.R. Part 63, Subpart DDDDD]

2. Control Equipment

An SCR system is utilized to reduce $NO_x$ emissions from the duct burners when fuel oil is not being fired in the CT. The SCR system includes an injection grid which disperses $NH_3$ into the flue gas upstream of the catalyst; the $NH_3$ and $NO_x$ are reduced to nitrogen gas ($N_2$) and water vapor ($H_2O$) in the presence of the catalyst reactor. When fuel oil is being fired in the CT units, the SCR system is not utilized.

An oxidation catalyst is located within each of the HRSG units, downstream of the duct burner but before the SCR system, which reduces CO by 85% from both CT and HRSG emissions. The oxidation catalyst also provides co-beneficial reduction of VOC in these emissions by an average of 15%.

3. Emission Limits Specific to HRSG #1, #2, and #3

Emission standards applicable to these HRSG units alone, along with the origin and authority of each standard are shown below. Because the HRSG units are not operated unless their associated CT are running, and because the exhaust streams from the HRSG units and CT are combined prior to exiting the stack, these emission limits are streamlined with the emission limits for the CT unit emissions in the following section K of this air emissions license, entitled *Cogeneration Train Requirements*.

| Pollutant | Applicable Standards | Origin and Authority |
|---|---|---|
| PM | 0.06 lb/MMBtu | 06-096 C.M.R. ch. 103 (2)(B)(1)(c) |
| | 6.27 lb/hr | A-718-71-A-N (March 31, 1998), BACT |
| $PM_{10}$ | 6.27 lb/hr | A-718-71-A-N March 31, 1998), BACT |
| $SO_2$ | 1.35 lb/hr | A-718-71-A-N (March 31, 1998), BACT |
| $NO_x$ | 0.20 lb/MMBtu | 40 C.F.R. Part 60, Subpart Db, § 60.44b(a)(1)(ii) |
| | 0.14 lb/MMBtu | A-718-71-A-N (March 31, 1998), BACT |
| Visible Emissions | 10% opacity on a six-minute block average basis. | 06-096 C.M.R. ch. 101 (3)(A)(3) |
| | 20% opacity, on a six-minute block average basis, except for one six-minute block per hour of not more than 27% opacity | A-718-71-A-N (March 31, 1998), BACT |

4. Fuel Use Limit

Pixelle Cogen shall fire only natural gas in the three HRSG units and shall not exceed a combined total of 2,637.2 million standard cubic feet per year (MMscf/yr).

## K. Cogeneration Train Requirements (CT and HRSG #1, #2, and #3)

1. Emission Limits: All Operation Except Startup, Shutdown, Turbine Re-Tuning, or Fuel Transfer

For each cogeneration train, the results of streamlining of applicable emissions standards from above, the origin and authority of the standards, and the applicable emission limits and associated averaging periods are presented below.

Those emission limits presented below having a 1-hour basis shall require stack testing when a compliance demonstration is requested by the Department. The 1-hour basis shall be the average of three one-hour compliance runs for each pollutant for which compliance is being demonstrated.

The $NO_x$ and CO lb/hr limit averaging times shown below are based on a 24-hour block average basis to accommodate fluctuations in emission rates due to actual operations, which include frequent start-ups and shutdowns in response to demand.

These limits apply during all operating times except startup, shutdown, turbine re-tuning, or fuel transfer.

| **Pollutant** | **Origin and Authority** | **Emission Standard** | |
|---|---|---|---|
| | *When the CT is firing:* | *Natural Gas* | *Distillate Fuel* |
| PM | 06-096-C.M.R. ch. 103 (2)(B)(1)(c) | 0.06 lb/MMBtu, 1-hour basis | |
| | A-718-71-A-N (March 31, 1998), BACT | 6.27 lb/hr, 1-hr basis | 24.21 lb/hr, 1-hr basis |
| $PM_{10}$ | A-718-71-A-N (March 31, 1998), BACT | 6.27 lb/hr, 1-hr basis | 24.21 lb/hr, 1-hr basis |
| $SO_2$ | A-718-71-A-N (March 31, 1998), BACT | 1.35 lb/hr (HRSG and/or CT firing natural gas) | -- |
| | 06-096 C.M.R. ch. 106 (3)(A)(2) | -- | 1.47 lb/hr,[2] 1-hour basis (CT firing distillate fuel and HRSG firing natural gas) |

[2] This limit was derived through mass balance calculations, assuming the sulfur content of natural gas to be 0.5 grains/100 scf and to be 15ppm for distillate fuel. Calculations also assumed equipment operating at their maximum firing rates and that 100% of the sulfur contained in the fuels was converted to $SO_2$.

| Pollutant | Origin and Authority | Emission Standard | |
|---|---|---|---|
| $NO_x$ | A-718-71-A-N (March 31, 1998), BACT | 6.0 ppmdv @ 15% $O_2$, 24-hr block average basis | -- |
| | | 4.5 ppmdv @ 15% $O_2$, 30-day rolling average basis | -- |
| | | -- | 42 ppmdv @ 15% $O_2$, 3-hour block average basis |
| | | 24.37 lb/hr, 24-hour block average basis | 133.25 lb/hr, 24-hour block average basis |
| CO | A-718-71-A-N (March 31, 1998), BACT | 74.21 lb/hr, 24-hour block average basis | 43.73 lb/hr, 24-hour block average basis |
| VOC | A-718-71-A-N (March 31, 1998), BACT | 2.13 lb/hr, 1-hour basis (CT only, firing natural gas) | 8.00 lb/hr, 1-hour basis (CT firing distillate fuel, or firing a combination of distillate fuel and natural gas) |
| | | 5.17 lb/hr, 1-hour basis (CT and HRSG, both firing natural gas) | 11.04 lb/hr, 1-hour basis (CT firing distillate fuel or a combination of distillate fuel and natural gas, HRSG firing natural gas) |
| Visible Emissions | A-718-71-A-N (March 31, 1998), BACT | 20% opacity, on a 6-minute block average basis, except for one six-minute block per hour of not more than 27% opacity | |
| $NH_3$ | A-718-71-A-N (March 31, 1998), BACT | 10 ppmdv @ 15% $O_2$, 30-day rolling average basis | |
| | | 20 ppmdv @ 15% $O_2$, 24-hour block average basis | |

2. Emission Limits: Startup, Shutdown, Turbine Re-Tuning, or Fuel Transfer

Emissions from each of the Cogeneration Trains #1, #2, and #3 shall not exceed the following limits during periods of startup, shutdown, turbine re-tuning, or fuel transfer while firing natural gas and/or fuel oil.

| Pollutant | Emission Limit, lb/hr |
|---|---|
| PM / $PM_{10}$ | 24.21, 1-hour basis |
| $SO_2$ | 1.35, 1-hour basis |
| $NO_x$ | 133.25, 24-hour block average basis * |
| CO | 74.21, 24-hour block average basis * |
| VOC | 36.10, 1-hour basis |

* $NO_x$ and CO lb/hr limit averaging times are based on a 24-hour block average basis to accommodate fluctuations in emission rates due to actual operations, which include frequent start-ups and shutdowns in response to demand.

For purposes of this air emission license, the following definitions shall apply:

a. *Fuel Transfer Mode* means the period of time during which the fuel fired in the combustion turbine is switched from distillate fuel to gas or from gas to distillate fuel.

b. *Turbine startup* shall be defined as the continuous transition from initiation of combustion turbine fuel firing until the unit reaches steady state operation at a load between 50% and 100% load conditions while firing natural gas, or at a load between 65% and 100% load conditions while firing distillate fuel. The normal rated load level compares the actual output of the turbine (MW) to the maximum potential output of the turbine (MW) at any given state of discharge pressure and inlet air temperature.

c. *Unit shutdown* shall be defined as that period of continuous transition from steady state operation within the load level ranges identified above in the *Turbine startup* definition to cessation of combustion turbine firing.

d. *Down* – A combustion turbine is considered *down* once fuel firing has ceased.

e. *Turbine re-tuning* shall be defined as the time from initiation of combustion turbine firing until the turbine reaches base load.

f. *Base load* means the load level at which the combustion turbine is normally operated.

3. Emission Limits During ISO-NE Emergency

The emission limits contained in this license do not apply if Pixelle Cogen is directed by Independent System Operator – New England (ISO-NE) during an electricity supply emergency to operate at loads too low for the SCR to be utilized due to unstable temperatures. During such operation, Pixelle Cogen shall use best operational practices to minimize emissions of air pollutants and shall commence operation of the SCR as soon as practicable once temperatures stabilize.

4. Emission Limit Compliance Methods and Frequency

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

| **Pollutant** | **Compliance Method** | **Frequency** |
|---|---|---|
| PM | Stack Test per 40 C.F.R. Part 60, Appendix A, Method 5 | Upon request |
| $PM_{10}$ | Stack Test per40 C.F.R. Part 60, Appendix A, Method 5 or EPA Test Method 201 or 201A | |
| $SO_2$ | Stack Test per 40 C.F.R. Part 60, Appendix A, Method 6 | |
| $NO_x$ | $NO_x$ CEMS | Continuously |
| CO | CO CEMS | |

| Pollutant | Compliance Method | Frequency |
|---|---|---|
| VOC | Stack Test per 40 C.F.R. Part 60, Appendix A, Method 25 or 25A | Upon request |
| Visible Emissions | 40 C.F.R. Part 60, Appendix A, Method 9 | |
| $NH_3$ | $NH_3$ CEMS | Continuously |

5. Continuous Emission Monitoring Systems

Pixelle Cogen shall operate and maintain the following continuous emission monitoring systems (CEMS) for the three cogeneration trains whenever their respective units are operating:

| Pollutant and Continuous Monitor | Unit of Measurement | Origin and Authority |
|---|---|---|
| $NO_x$ CEMS | lb/hr and ppmdv | 40 C.F.R. Part 75 and 06-096 C.M.R. ch. 117 |
| CO CEMS | lb/hr | 06-096 C.M.R. ch. 117 |
| $O_2$ CEMS | percent | 40 C.F.R. Part 75, 06-096 C.M.R. ch. 117 |
| $NH_3$ CEMS | ppmdv | 06-096 C.M.R. ch. 117 |

Note: The CO CEMS, $NH_3$ CEMS, and $O_2$ CEMS (to the extent that it acts as a diluent for the CO and $NH_3$ CEMS) are regulated by 06-096 C.M.R. ch. 117 which incorporates 40 C.F.R. Part 60 by reference and includes state specific clarifications. The $NO_x$ CEMS and $O_2$ CEMS (to the extent that it acts as a diluent for $NO_x$) are regulated by 40 C.F.R. Part 75 and 06-096 C.M.R. ch. 117; however, 40 C.F.R. Part 75 supersedes 06-096 C.M.R. ch. 117.

Notwithstanding the above paragraphs, the $NH_3$ CEMS quality assurance procedure shall include daily $NO_x$ and $NH_3$ calibration checks, quarterly calibration gas audits (CGA) for the stack $NO_x$ analyzers only (unconverted $NO_x$ data), and annual relative accuracy test audits (RATA) for both the $NO_x$ and the calculated $NH_3$ data; CGA specifically for $NH_3$ shall not be required.

Pixelle Cogen is not required to continuously monitor opacity of emissions from the cogeneration trains, since the annual capacity factor for non-gaseous fuels is less than 30%, per 06-096 C.M.R. ch. 117 (1)(B)(1)(b). The distillate fuel use cap for the combustion turbine limits the distillate fuel consumption to less than 30% of the annual capacity factor.

6. Emission Tracking Clarifications

For each hour that any distillate fuel is fired in any of the combustion turbines, the monitored $NO_x$ ppmdv emissions shall not be included in determining compliance with the natural gas $NO_x$ ppmdv 30-day rolling and 24-hour block average emission limits as specified in this order for such combustion turbines that are firing distillate fuel.

For each hour that any distillate fuel is fired in any of the combustion turbines, the monitored $NO_x$ ppmdv emissions shall be used to comply with the $NO_x$ emission limits as specified in this license for distillate fuel firing for such combustion turbines that are firing distillate fuel.

Any portion of a block hour in which distillate fuel is fired in a combustion turbine shall be considered a block hour ppmdv emission and included in the 24-hour and 3-hour $NO_x$ emission block averages for distillate fuel firing above.

For any portion of a calendar day in which distillate fuel is fired in a combustion turbine, the monitored $NO_x$ and CO lb/hr emissions for that calendar day shall be included in the average to demonstrate compliance with the distillate fuel firing lb/hr limits, as appropriate, for that combustion turbine firing distillate fuel.

$NO_x$ emissions occurring during periods of startup, shutdown, turbine re-tuning, or fuel transfer are subject to the emission limits that were previously identified in Item 2 of this section and shall not be included in the 24-hour and 3-hour $NO_x$ emissions block averages that are applicable to operation outside of those categories.

7. Periodic and Parametric Monitoring

   a. Pixelle Cogen shall operate monitors and record the following as specified for each of the three combustion turbines whenever the equipment is operating.

| **Monitor *for Each* Combustion Turbine** | | | |
|---|---|---|---|
| **Parameter** | **Units** | **Monitoring Tool / Method** | **Frequency** |
| Fuel Oil Flow Rate | Gallons per hour (gph) | Fuel Flow Meter | Continuously* |
| Natural Gas Flow Rate | Standard Cubic Feet per Hour (scfh) | Fuel flow Meter | |
| Electric Output | Megawatts (MW) | Electrical Meter | |
| Sulfur content of Distillate Fuel Fired | Percent, by weight (%) | Fuel Receipts from Supplier | As fuel is purchased |

| Monitor *for Each* Combustion Turbine | | | |
|---|---|---|---|
| Turbine Air Inlet Temperature | °F | Temperature Probe | Continuously* |
| Turbine Electric Load Level | Percent (%) | Electrical Output (MW) meter and Maximum Potential Load (based on inlet air temperature and unit's discharge pressure. | |

b. Pixelle Cogen shall operate monitors and record the following parameters as specified for each of the three HRSG units whenever the equipment is operating:

| Monitor for Each of HRSG #1, #2, and #3 | | | |
|---|---|---|---|
| **Parameter** | **Units** | **Monitoring Method** | **Frequency** |
| HRSG natural gas flow rate | scf/hr | Fuel flow meter | Continuously* |

* Continuously is defined as a minimum of three points in a one-hour period.

**L. Glycol System Heaters #1 and #2**

Glycol System Heaters #1 and #2 each have a maximum capacity of 3.05 MMBtu/hour and fire natural gas exclusively.

1. BPT Findings

BPT for the Glycol System Heaters are based on the following:

Natural Gas

| | |
|---|---|
| PM, $PM_{10}$ | 0.05 lb/MMBtu, Air Emission License A-718-71-A-N, dated March 31, 1998, BACT |
| $SO_2$ | 0.6 lb/MMscf, AP-42, Table 1.4-2, dated 7/98 |
| $NO_x$ | 100 lb/MMscf, AP-42, Table 1.4-1, dated 7/98 |
| CO | 84 lb/MMscf, AP-42, Table 1.4-1, dated 7/98 |
| VOC | 5.5 lb/MMscf, AP-42, Table 1.4-2, dated 7/98 |
| Visible Emissions | 06-096 C.M.R. ch. 101 |

The BPT emission limits for each of the Glycol System Heaters are the following:

| Unit | Pollutant | lb/MMBtu |
|---|---|---|
| Glycol System Heaters #1 and #2 | PM | 0.06 |

The BPT emission limits for the Glycol System Heaters are as follows, and are based on a fuel heat content of 1020 Btu/scf:

| Unit | PM | $PM_{10}$ | $SO_2$ | $NO_x$ | CO | VOC |
|---|---|---|---|---|---|---|
| Glycol System Heater #1<br>3.05 MMBtu/hr, natural gas | 0.15 | 0.15 | 0.01 | 0.3 | 0.25 | 0.02 |
| Glycol System Heater #2<br>3.05 MMBtu/hr, natural gas | 0.15 | 0.15 | 0.01 | 0.3 | 0.25 | 0.02 |

Compliance with emission limits for Glycol System Heaters #1 and #2 shall be demonstrated through stack testing, performed upon request from the Department and in accordance with the appropriate method as specified in 40 C.F.R. Part 60, Appendix A.

Visible emissions from either of the Glycol System Heaters shall not exceed 10% opacity on a six-minute block average basis.

2. Federal Regulations

a. NSPS 40 C.F.R. Part 60, Subpart Dc

The Glycol System Heaters are not subject to NSPS 40 C.F.R. Part 60, Subpart Dc - *Standards of Performance for Boilers Manufactured after June 9, 1989*, because they have maximum heat inputs of less than 10 MMBtu/hour.

b. NESHAP 40 C.F.R. Part 63, Subpart DDDDD

Under 40 C.F.R. Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, Glycol System Heaters #1 and #2 are considered existing units designed to burn Gas 1 fuels, and are subject to work practice standards and related recordkeeping and reporting requirements for existing units designed to burn Gas 1 fuels, as defined in 40 C.F.R. § 63.7575.

*Tune-Ups and Energy Assessments*
The facility shall conduct tune-ups of the glycol system heaters in accordance with the procedures described in § 63.7540(a)(10)(i) through (vi). [40 C.F.R. § 63.7500(e)]

Subsequent tune-ups shall be conducted on each unit every 5 years, and no more than 61 months after the previous tune-up of that unit. [40 C.F.R. § 63.7515(d)]

A one-time energy assessment was required to be performed by a qualified energy assessor no later than January 31, 2016. Pixelle Cogen had these assessments performed on Glycol System Heaters #1 and #2 between August 30th and September 2nd, 2015.

*Recordkeeping*
Pixelle Cogen shall maintain records on the Glycol System Heaters in accordance with 40 C.F.R. §§ 63.10(b) and 63.7555, and containing information necessary to document compliance with all applicable requirements, including but not limited to the following:

(1) A copy of each notification and report submitted to comply with this Subpart, along with any supporting documentation.
(2) Records of energy assessments and tune-ups, as applicable.

*Reporting*
Pixelle Cogen shall submit a compliance report for each tune-up required by this Subpart in accordance with 40 C.F.R. § 63.7550.

## M. Oil Storage Tank #1

Pixelle Cogen maintains an oil storage tank which is currently used to store distillate fuel. The tank is an above ground, steel, fixed-roof tank with a capacity of 350,000 gallons, and was manufactured in 1998.

Oil Storage Tank #1 is not subject to NSPS 40 C.F.R. Part 60, Subpart Kb – *Standards of Performance for Liquid Organic Storage Vessels (Including Petroleum Liquid Storage Vessels),* constructed after July 23, 1984, because the vapor pressure of the tank contents is less than 3.5 kPa. [40 C.F.R. § 60.110b(b)]

## N. Parts Washer

The parts washer was manufactured and installed in 1999 and has a design capacity of 30 gallons. Based on the solvent used, the parts washer is subject to *Solvent Degreasers,* 06-096 C.M.R. ch. 130.

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

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

## O. 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.

**P. Annual Emission Statement**

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

**Q. Facility Annual Emissions**

Pixelle Cogen shall be restricted to the following annual emissions, based on a 12-month rolling total. With the exception of $NH_3$, the tons per year limits were calculated based on the following:

1. Firing the combustion turbines on distillate fuel at maximum capacity until they reached the annual licensed limit of 11,180,000 gallons per year, while simultaneously firing the HRSG's on natural gas at their maximum capacities for the same duration;
2. Firing the combustion turbines and the HRSG's at their maximum capacities on natural gas until the HRSG's annual licensed limit of 2,637.2 MMscf of natural gas for the HRSG's has been expended;
3. Firing the combustion turbines alone at maximum capacity on natural gas for the remainder of the year.
4. The distillate fuel fired in the combustion turbines having a maximum sulfur content of 0.0015% by weight; and
5. Glycol System Heaters #1 and #2 operating 8,760 hours per year firing natural gas at maximum capacity.

**Total Licensed Annual Emissions for the Facility**
**Tons/year**
(used to calculate the annual license fee)

<table>
<tr><th>Unit</th><th>PM</th><th>$PM_{10}$</th><th>$SO_2$</th><th>$NO_x$</th><th>CO</th><th>VOC</th><th>$NH_3$</th></tr>
<tr><td>Cogeneration Trains #1, #2, and #3<br>(Combustion Turbines and HRSG's combined, with turbines firing distillate fuel and HRSG's firing natural gas)</td><td>27.47</td><td>27.47</td><td>2.71</td><td>151.18</td><td>49.61</td><td>12.53</td><td rowspan="3">62.7</td></tr>
<tr><td>Cogeneration Trains #1, #2, and #3<br>(Combustion Turbines and HRSG's combined, with both firing natural gas)</td><td>20.63</td><td>20.63</td><td>4.44</td><td>80.17</td><td>244.13</td><td>17.01</td></tr>
<tr><td>Cogeneration Trains #1, #2, and #3<br>(Combustion Turbines only, firing natural gas)</td><td>54.65</td><td>54.65</td><td>11.77</td><td>212.40</td><td>646.80</td><td>18.56</td></tr>
<tr><td>Glycol System Heaters #1 and #2</td><td>1.34</td><td>1.34</td><td>0.02</td><td>2.62</td><td>2.20</td><td>0.1</td><td>--</td></tr>
<tr><td>Total TPY</td><td>104.1</td><td>104.1</td><td>18.9</td><td>446.4</td><td>942.7</td><td>48.2</td><td>62.7</td></tr>
</table>

Yearly emissions of $NH_3$ from the SCR System were calculated using average stack conditions to convert $NH_3$ limits in ppm to lb/hr limits. Based on historical stack test data, $NH_3$ emissions are higher when the turbines fire alone and lower when the turbines and the duct burners are operated simultaneously. Yearly $NH_3$ emissions were calculated based on maximum operation of the turbines without the duct burners operating.

## III. AMBIENT AIR QUALITY ANALYSIS

Pixelle Cogen previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-718-71-A-N, issued on March 31, 1998). An additional ambient air quality analysis is not required for this Part 70 License.

## ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:
- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-718-70-F-R/A 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 Pixelle Cogen pursuant to the Department's preconstruction permitting requirements have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous, or otherwise environmentally insignificant, as explained in the Findings of Fact accompanying this Order. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

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

Severability. The invalidity or unenforceability of any provision of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

**STANDARD STATEMENTS**

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 140]

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

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

(4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
[06-096 C.M.R. ch. 140]

(5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 C.M.R. ch. 140]

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

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

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

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under

Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated January 30, 2008.

**Permit Shield Table**

| Source | Citation | Description | Basis for Determination |
|---|---|---|---|
| Facility | 06-096 C.M.R. ch. 134 | Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds (VOC-RACT) | Fuel burning equipment is exempt from the requirements of this rule. |
| Facility | 06-096 C.M.R. ch. 138 | Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides ($NO_x$-RACT) | The rule only applied to existing stationary sources at the time the rule was put into effect in 1994. The facility did not exist at that time and is therefore exempt from the requirements of the rule. |
| HRSGs | 40 C.F.R. Part 60, Subpart D | Standards of Performance for Fossil Fuel Fired Steam Generators | The HRSGs meet the applicability requirements of paragraph (a) of § 60.40b of 40 C.F.R. Part 60 Subpart Db and are therefore not subject to Subpart D. [40 C.F.R. Part 60, Subpart Db, § 60.40b(j) |
| HRSGs | 40 C.F.R. Part 60, Subpart Da | Standards of Performance for Electric Utility Steam Generating Units for which Construction commenced after September 18, 1978 | For each HRSG, no more than 33% of the potential electrical output capacity and less than 25 MW electrical output will be supplied to any utility power distribution system for sale. [40 C.F.R. Part 60, Subpart Da, § 60.40a(b)] |
| Glycol System Heaters #1 & #2 | 40 C.F.R. Part 60, Subpart Dc | Standards of Performance for Boilers Manufactured After June 9, 1989 with Maximum Heat Inputs of More than 10 MMBtu/hour | Glycol System Heaters are smaller than threshold heat inputs. |
| Oil Storage Tank #1 | 40 C.F.R. Part 60, Subpart K | Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 | Oil Storage Tank #1 was constructed in 1998. |

| Source | Citation | Description | Basis for Determination |
|---|---|---|---|
| Oil Storage Tank #1 | 40 C.F.R. Part 60, Subpart Ka | Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 | Oil Storage Tank #1 was constructed in 1998. |
| Oil Storage Tank #1 | 40 C.F.R. Part 60, Subpart Kb | Standards of Performance for Volatile Organic Liquid Storage Vessels | The vapor pressure of the tank contents is less than 3.5 kPa. |
| CTs | 40 C.F.R. Part 60, Subpart KKKK | Standards of Performance for Stationary Combustion Turbines | The combustion turbines were constructed in 1999, prior to the applicability date of February 18, 2005 for Subpart KKKK. |
| CTs | 40 C.F.R. Part 63, Subpart YYYY | NESHAP for Stationary Gas Turbines | The combustion turbines meet the definition of an existing source, which are not subject to the requirements of Subpart YYYY. |
| HRSGs | 40 C.F.R. Part 63, Subpart DDDDD | National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters | Heat Recovery Steam Generators (HRSGs) are classified as waste heat boilers by this regulation. Waste heat boilers are exempt from the requirements of Subpart DDDDD. |
| CTs and HRSGs | 40 C.F.R. Part 64 | Compliance Assurance Monitoring (CAM) | CAM is not required where a Part 70 permit specifies a continuous compliance determination, such as continuous emissions monitoring (CEMS). Pixelle Cogen is required by their Part 70 permit to continuously monitor their emissions with CEMS. |

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

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

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

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

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

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

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

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

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

**STANDARD CONDITIONS**

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (38 M.R.S. § 347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140. [06-096 C.M.R. ch. 140]

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 140] **Enforceable by State-only**

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

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 140]
**Enforceable by State-only**

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

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

(8) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

A. Perform stack testing under circumstances representative of the facility's normal process and operating conditions:

1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring, or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

2. To demonstrate compliance with the applicable emission standards; or

3. Pursuant to any other requirement of this license to perform stack testing.

B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. Submit a written report to the Department within thirty (30) days from date of test completion.

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

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

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

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

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

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

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

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

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

(11) Upon the written request of the Department, the licensee shall establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment; sample such emissions in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe; and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 140]

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

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

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

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

**SPECIFIC CONDITIONS**

(14) **Definitions of Averaging Times**
[06-096 C.M.R. ch. 140, BPT]

The following shall apply to the conditions in this order as appropriate, unless it is specifically stated as otherwise for such unit:

A. A 24-hour block average basis shall be calculated as the arithmetic average of not more than 24 one-hour block periods, and not less than 18 one-hour block periods. Only one 24-hour block average shall be calculated for one day, beginning at midnight.

B. A 3-hour block average basis shall be calculated as the arithmetic average of not more than three one-hour block periods. No more than eight three-hour block averages shall be calculated for one day. One three-hour block average shall be calculated for the period from midnight to 3:00 a.m., one from 3:00 a.m. to 6:00 a.m., one from 6:00 a.m. to 9:00 a.m., etc.

C. A 30-day rolling average basis for a monitored pollutant shall be calculated in accordance with 40 C.F.R. Part 60, Subpart Db and shall be the arithmetic average of all hourly emission data collected by the CEMs for that pollutant during the preceding 30 operating days for the emission unit.

(15) **Cogeneration Trains #1, #2 and #3**

A Cogeneration Train shall consist of a combustion turbine (CT) followed by a duct burner fired heat recovery system generator (HRSG).

The exhaust from each Cogeneration Train shall be vented through a separate flue to one of the three closely bundled, separate stacks at least 212 feet above ground level. [06-096 C.M.R. ch. 140, BPT]

A. <u>Combustion Turbines #1, #2 and #3</u>

*<u>Fuel Oil Constraints</u>*

1. Distillate fuel purchased or otherwise obtained by Pixelle Cogen shall have a maximum sulfur content of 0.0015% by weight (15 ppm). [38 M.R.S. § 603-A(2)(A)(3)]

2. Compliance with the distillate fuel sulfur content limit shall be demonstrated by fuel delivery records from the supplier showing the quantity, type, and percent sulfur of the fuel delivered. [06-096 C.M.R. ch. 140, BPT]

3. Pixelle Cogen shall not exceed a facility distillate fuel use of 11,180,000 gallons per year. Compliance with this facility fuel limit shall be demonstrated using fuel flow monitors and recorded on a monthly and a 12-month rolling total basis. [A-718-70-A-I (July 30, 2003), BPT]

*$NO_x$ and CO Emission Limits: Emission Tracking Clarifications*

4. For each hour that any distillate fuel is fired in Turbine #1, Turbine #2, or Turbine #3, the monitored $NO_x$ ppmvd emissions shall not be included in determining compliance with the natural gas $NO_x$ ppmvd 30-day rolling and 24-hour block average emission limits as specified in this Order for such turbines that are firing distillate fuel.

5. For each hour that any distillate fuel is fired in Turbine #1, Turbine #2, or Turbine #3, the monitored $NO_x$ ppmvd emissions shall be used to comply with the emission limits as specified in this license for fuel oil firing for such turbines that are firing distillate fuel.

6. Any portion of a block hour in which distillate fuel is fired in a turbine shall be considered a monitored block hour ppmvd emission and included in the average to demonstrate compliance with the distillate fuel firing ppmvd limits.

7. Hours affected by startup and shutdown shall not be included in the 24-hour and 3-hour $NO_x$ emissions block averages which exclude startup and shutdown periods.

8. For any portion of a calendar day in which distillate fuel is fired in a turbine, the monitored $NO_x$ and CO lb/hour emissions for that calendar day shall be included in the average to demonstrate compliance with the distillate fuel firing lb/hour limits, as appropriate, for that turbine firing distillate fuel.

[ A-718-70-A-I (July 30, 2003), BPT]

B. Heat Recovery Steam Generators #1, #2, and #3

1. Only natural gas shall be fired in the duct burners of HRSG #1, #2, and #3.

2. Pixelle Cogen shall not exceed the combined natural gas fuel use limit of 2,637.2 MMscf/year to be fired in HRSG #1, #2, and #3.

3. Compliance with the fuel use limit shall be demonstrated using fuel flow meter(s) to continuously monitor the natural gas usage in the HRSG units, measured in standard cubic feet per hour (scfh). The fuel use shall be tracked on a monthly and a 12-month rolling total basis.

[ A-718-70-A-I (July 30, 2003), BPT]

C. Control Equipment

Pixelle Cogen shall engage the air pollution control strategies identified in the table below whenever the emission unit or units are in operation, except that the SCR system need not operate during a turbine startup, shutdown, turbine re-tuning, or fuel transfer period. [ A-718-70-A-I (July 30, 2003), BPT]

| Unit | Pollutant | Control Strategies |
|---|---|---|
| Combustion Turbines | $NO_x$ | Water Injection (during distillate fuel firing only) |
| | | Low $NO_x$ combustors |
| Heat Recovery Steam Generators | $NO_x$ | Low $NO_x$ burners |
| Combustion Turbines and Heat Recovery Steam Generators | $NO_x$ | Selective Catalytic Reduction (during natural gas firing only) |
| | $SO_2$ | Combustion of low sulfur fuels |
| | CO | Catalytic Oxidation, good combustion practices |
| | PM, $PM_{10}$ | Good combustion practices, combustion of clean fuels |
| | VOC | Catalytic Oxidation, good combustion practices |

D. Cogeneration Trains #1, #2, and #3

1. Emission Limits: Normal Operation

For each cogeneration train, the results of streamlining of applicable emissions standards from above, the origin and authority of the standards, and the applicable emission limits and associated averaging periods are presented below.

Those emission limits presented below having a 1-hour basis shall require stack testing when a compliance demonstration is requested by the Department. The 1- hour basis shall be the average of three one-hour compliance runs for each pollutant for which compliance is being demonstrated.

The $NO_x$ and CO lb/hr limit averaging times shown below are based on a 24-hour block average basis to accommodate fluctuations in emission rates due to actual operations, which include frequent start-ups and shutdowns in response to demand.

These limits apply during all operating times except startup, shutdown, turbine re-tuning, or fuel transfer.

<table>
<tr><th><u>Pollutant</u></th><th><u>Origin and Authority</u></th><th colspan="2"><u>Emission Standard</u></th></tr>
<tr><td colspan="2"><u>When the CT is firing:</u></td><td><u>Natural Gas</u></td><td><u>Distillate Fuel</u></td></tr>
<tr><td rowspan="2">PM</td><td>06-096-C.M.R. ch. 103 (2)(B)(1)(c)</td><td colspan="2">0.06 lb/MMBtu, 1-hour basis</td></tr>
<tr><td>A-718-71-A-N (March 31, 1998), BACT</td><td>6.27 lb/hr, 1-hr basis</td><td>24.21 lb/hr, 1-hr basis</td></tr>
<tr><td>$PM_{10}$</td><td>A-718-71-A-N (March 31, 1998), BACT</td><td>6.27 lb/hr, 1-hr basis</td><td>24.21 lb/hr, 1-hr basis</td></tr>
<tr><td rowspan="2">$SO_2$</td><td>A-718-71-A-N (March 31, 1998), BACT</td><td>1.35 lb/hr (HRSG and/or CT firing natural gas)</td><td>--</td></tr>
<tr><td>06-096 C.M.R. ch. 106 (3)(A)(2)</td><td>--</td><td>1.47 lb/hr, 1-hour basis (CT firing distillate fuel and HRSG firing natural gas)</td></tr>
<tr><td rowspan="4">$NO_x$</td><td rowspan="4">A-718-71-A-N (March 31, 1998), BACT</td><td>6.0 ppmdv @ 15% $O_2$, 24-hr block average basis</td><td>--</td></tr>
<tr><td>4.5 ppmdv @ 15% $O_2$, 30-day rolling average basis</td><td>--</td></tr>
<tr><td>--</td><td>42 ppmdv @ 15% $O_2$, 3-hour block average basis</td></tr>
<tr><td>24.37 lb/hr, 24-hour block average basis</td><td>133.25 lb/hr, 24-hour block average basis</td></tr>
<tr><td>CO</td><td>A-718-71-A-N (March 31, 1998), BACT</td><td>74.21 lb/hr, 24-hour block average basis</td><td>43.73 lb/hr, 24-hour block average basis</td></tr>
<tr><td rowspan="2">VOC</td><td rowspan="2">A-718-71-A-N (March 31, 1998), BACT</td><td>2.13 lb/hr, 1-hour basis (CT only, firing natural gas)</td><td>8.00 lb/hr, 1-hour basis (CT firing distillate fuel, or firing a combination of distillate fuel and natural gas)</td></tr>
<tr><td>5.17 lb/hr, 1-hour basis (CT and HRSG, both firing natural gas)</td><td>11.04 lb/hr, 1-hour basis (CT firing distillate fuel or a combination of distillate fuel and natural gas, HRSG firing natural gas)</td></tr>
<tr><td>Visible Emissions</td><td>A-718-71-A-N (March 31, 1998), BACT</td><td colspan="2">20% opacity, on a 6-minute block average basis, except for one six-minute block per hour of not more than 27% opacity</td></tr>
<tr><td rowspan="2">$NH_3$</td><td rowspan="2">A-718-71-A-N (March 31, 1998), BACT</td><td colspan="2">10 ppmdv @ 15% $O_2$, 30-day rolling average basis</td></tr>
<tr><td colspan="2">20 ppmdv @ 15% $O_2$, 24-hour block average basis</td></tr>
</table>

2. Emission Limits: Startup, Shutdown, Turbine Re-tuning, and Fuel Transfer

a. Emissions from the Cogeneration Trains #1, #2, and #3 shall not exceed the following limits during periods of startup, shutdown, turbine re-tuning, or fuel transfer while firing either natural gas or fuel oil.

| Pollutant | Emission Limit, lb/hr |
|---|---|
| PM / $PM_{10}$ | 24.21, 1-hour basis |
| $SO_2$ | 1.35, 1-hour basis |
| $NO_x$ | 133.25, 24-hour block average basis * |
| CO | 74.21, 24-hour block average basis * |
| VOC | 36.10, 1-hour basis |

* $NO_x$ and CO lb/hr limit averaging times are based on a 24-hour block average basis to accommodate fluctuations in emission rates due to actual operations, which include frequent start-ups and shut-downs in response to demand.

b. *Fuel Transfer Mode* shall mean the period of time during which the fuel fired in the combustion turbine is switched from distillate fuel to gas or from gas to distillate fuel.

c. *Turbine startup* shall be defined as the continuous transition from initiation of combustion turbine fuel firing until the unit reaches steady state operation at a load between 50% and 100% load conditions while firing natural gas, or at a load between 65% and 100% load conditions while firing distillate fuel. The normal rated load level compares the actual output of the turbine (MW) to the maximum potential output of the turbine (MW) at any given state of discharge pressure and inlet air temperature.

d. *Unit shutdown* shall be defined as that period of continuous transition from steady state operation within the load level ranges identified above in the *Turbine startup* definition to cessation of combustion turbine firing.

e. *Down* – A combustion turbine shall be considered *down* once fuel firing has ceased.

f. *Turbine re-tuning* shall be defined as the time from initiation of combustion turbine firing until the turbine reaches base load.

g. *Base load* shall mean the load level at which the combustion turbine is normally operated.

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

3. Emission Limit Compliance Methods and Frequencies

Compliance with the emission limits for the cogeneration trains shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

| Pollutant | Compliance Method | Frequency |
|---|---|---|
| PM | Stack Test per 40 C.F.R. Part 60, Appendix A, Method 5 | Upon request |
| $PM_{10}$ | Stack Test per 40 C.F.R. Part 60, Appendix A, Method 5 or EPA Test Method 201 or 201A | |
| $SO_2$ | Stack Test per 40 C.F.R. Part 60, Appendix A, Method 6 | |
| $NO_x$ | $NO_x$ CEMS | Continuously |
| CO | CO CEMS | |
| VOC | Stack Test per 40 C.F.R. Part 60, Appendix A, Method 25 or 25A | Upon request |
| Visible Emissions | 40 C.F.R. Part 60, Appendix A, Method 9 | |
| $NH_3$ | $NH_3$ CEMS | Continuously |

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

4. Continuous Emission Monitoring Systems

a. Pixelle Cogen shall continuously monitor the $NO_x$, CO, and $NH_3$ emissions from each Cogeneration Train. Pixelle Cogen shall operate, calibrate, and maintain the $NO_x$ and $O_2$ CEMS and applicable monitoring devices according to 40 C.F.R. Part 75. The CO and $NH_3$ (and $O_2$ diluent) CEMS are subject to the requirements of 06-096 C.M.R. ch. 117.

The table below lists the required CEMS, the units of measurement for each monitor, and the origin and authority.

| Pollutant and Continuous Monitor | Unit of Measurement | Origin and Authority |
|---|---|---|
| $NO_x$ CEMS | lb/hr and ppmdv | 40 C.F.R. Part 75 and 06-096 C.M.R. ch. 117 |
| CO CEMS | lb/hr | 06-096 C.M.R. ch. 117 |
| $O_2$ CEMS | percent | 40 C.F.R. Part 75 and 06-096 C.M.R. ch. 117 |
| $NH_3$ CEMS | ppmdv | 06-096 C.M.R. ch. 117* |

* Notwithstanding the above, the $NH_3$ CEMS quality assurance procedure shall include daily $NO_x$ and $NH_3$ calibration checks, quarterly calibration gas audits (CGA) for the stack $NO_x$ analyzers only (unconverted $NO_x$ data), and annual relative accuracy test audits (RATA) for both the $NO_x$ and the calculated $NH_3$ data; CGA specifically for $NH_3$ shall not be required.

b. Cogen shall continuously monitor and record NOx emission from each cogeneration train using NOx CEMS. EPA has determined this method of NOx monitoring to be an appropriate alternative means for demonstrating compliance with 40 CFR Part 60.334(a). Records shall be maintained according to Standard Condition (6) of this license and 40 CFR Part 60, Subpart GG.

[06-096 CMR 115 and 117; 40 CFR Part 60, Subpart GG; 40 CFR Part 75]

5. Periodic and Parametric Monitoring

Pixelle Cogen shall operate monitors and record the following as specified for each of the three combustion turbines whenever the equipment is operating.

| **Monitor *for Each* Combustion Turbine** | | | |
|---|---|---|---|
| **Parameter** | **Units** | **Monitoring Tool / Method** | **Frequency** |
| Fuel Oil Flow Rate | Gallons per hour (gph) | Fuel Flow Meter | Continuously* |
| Natural Gas Flow Rate | Standard Cubic Feet per Hour (scfh) | Fuel flow Meter | |
| Electric Output | Megawatts (MW) | Electrical Meter | |
| Sulfur content of Distillate Fuel Fired | Percent, by weight (%) | Fuel Receipts from Supplier | As fuel is purchased |
| Turbine Air Inlet Temperature | °F | Temperature Probe | Continuously* |
| Turbine Electric Load Level | Percent (%) | Electrical Output (MW) meter and Maximum Potential Load (based on inlet air temperature and unit's discharge pressure. | |

* Continuously is defined as a minimum of three points in a one-hour period

6. VOC Emissions Calculation Method [06-096 CMR 140, BPT]

Pixelle Cogen shall not exceed 49.9 tons/year of VOC emissions on a facility wide basis. Pixelle Cogen shall track fuel use in each CT, HRSG, and in Heaters #1 and #2 during normal operation on a 12-month rolling total basis. Pixelle Cogen shall also track the time spent in startup, shutdown, and fuel transfer modes. [06-096 CMR 140, BPT]

VOC emissions under normal operating conditions shall be calculated using the following methods:

a. Turbines firing low sulfur distillate fuel oil:

A = (a) (0.00041 lb VOC/MMBtu) (1 ton/2000 lb)

where A = ton VOC/year
a = 12-month rolling total of heat input from fuel oil, in MMBtu/year

b. Turbines firing natural gas:

B = (b) (0.0021 lb VOC/MMBtu) (1 ton /2000 lb)

where B = ton VOC/year
b = 12-month rolling total of heat input from natural gas, in MMBtu/year

c. HRSG and Heaters #1 and #2 firing natural gas:

C = (c) (0.0054 lb VOC/MMBtu) (1 ton/2000 lb)

where C = ton VOC/year
c = 12-month rolling total of heat input from natural gas, in MMBtu/year

d. Under startup, shutdown, or fuel transfer periods, VOC emissions shall be calculated from the lb/hour emission limit as required in Specific Condition (15)(E) as follows:

D = (d)(36.10 lb VOC/hour) (1 ton/2000 lb)

where D = ton VOC/year
d = hours of startup, shutdown, or fuel transfer periods in the most recent 12 months

e. Total facility VOC emissions (tons/year) = A+B+C+D

f. Total facility VOC emissions (tons/year) ≤ 49.9 tons/year.

(16) **Cogeneration Train Fuel Nitrogen and Sulfur Content Monitoring**
[ 40 C.F.R. Part 60, Subpart GG]

The combustion turbines at Pixelle Cogen are subject to 40 C.F.R. Part 60, Subpart GG. However, in a letter dated February 20, 2001, the EPA approved alternative monitoring procedures as routine and acceptable for monitoring the nitrogen and sulfur content in natural gas and distillate fuel that is fired in combustion turbines. The Department approves the following alternative monitoring procedures for Pixelle Cogen:

A. *Natural Gas*

1. Nitrogen Content Monitoring: No monitoring of fuel nitrogen content is required.
2. Sulfur Content Monitoring: Not required when fuel is demonstrated by the methods of § 60.334(h)(3) to meet the definition of "natural gas" from § 60.331(v) of Subpart GG.

B. *Distillate Fuel*

1. Nitrogen Content Monitoring: No monitoring of fuel nitrogen content is required.
2. Sulfur Content Monitoring: A receipt identifying sulfur content shall be obtained from each fuel supplier for each filling event. One filling event will be considered as all delivery trucks filled with distillate fuel from the same tank at the distributor's tank farm that are received within a fuel lot. A fuel lot is defined as a shipment or delivery of a single type of fuel from a group of trucks from the same supply source.

(17) **ISO-NE Emergency**

The emission limits contained in this license do not apply if the facility, during an electricity supply emergency, is directed by Independent System Operator – New England (ISO-NE) to operate at low loads such that the SCR cannot be operated because of unstable temperatures. During such operation, Pixelle Cogen shall use best operational practices to minimize emissions of air pollutants and shall operate the SCR as soon as practicable once temperatures stabilize. [06-096 C.M.R ch. 140, BPT]

(18) **Glycol System Heaters #1 and #2**
[06-096 C.M.R ch. 140, BPT]

A. Glycol System Heaters #1 and #2 shall fire natural gas exclusively.

B. Emissions from the Glycol System Heaters shall not exceed the following:

| Unit | PM (lb/MMBtu) | PM (lb/hr) | PM10 (lb/hr) | SO2 (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|---|
| Glycol System Heater #1 | 0.05 | 0.15 | 0.15 | 0.01 | 0.30 | 0.25 | 0.02 |
| Glycol System Heater #2 | 0.05 | 0.15 | 0.15 | 0.01 | 0.30 | 0.25 | 0.02 |

C. Compliance with the above emission limits shall be demonstrated through stack testing upon request of the Department and in accordance with the appropriate method found in 40 C.F.R. Part 60, Appendix A.

D. Visible emissions from either Glycol System Heater #1 or #2 shall not exceed 10% opacity on a six minute block average basis.

E. NESHAPs 40 C.F.R. Part 63, Subpart DDDDD

1. Work Practice Standards

   a. Pixelle Cogen shall conduct tune-ups on Glycol System Heaters #1 and #2 every five years or sooner, following the procedures described in § 63.7540. [40 C.F.R. § 63.7500(e)]

   b. Each five-year tune-up must be conducted on Glycol System Heaters #1 and #2 no more than 61 months after the previous tune up. [40 C.F.R. § 63.7515(d)]

2. Recordkeeping and Reporting

   a. Pixelle Cogen shall maintain records in accordance with 40 C.F.R. § 63.7555.

   b. Records shall be in a form suitable and readily available for expeditious review, in accordance with 40 C.F.R. § 63.10(b)(1).

   c. Pixelle Cogen shall submit a compliance report for each tune-up required by Subpart DDDDD on the Glycol System Heaters, in accordance with 40 C.F.R. § 63.7550.

(19) **Parts Washer**

The parts washer at Pixelle Cogen is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

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

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

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

2. Wipe cleaning; and,

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

C. The following standards apply to cold cleaning machine that is subject to 06-096 C.M.R. ch. 130.

1. Pixelle Cogen shall attach a permanent conspicuous label to the 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]

(20) **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)]

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

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

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

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

**Enforceable by State-only**

(22) **CEMS Recordkeeping**
[06-096 C.M.R. ch. 140]

A. The licensee shall maintain records documenting that all CEMS 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, or 40 C.F.R. Part 75, as applicable;

B. The licensee shall maintain records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS 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 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.

**Enforceable by State-only**

(23) **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 all control equipment, parameter monitors, and CEMS required by this license. [06-096 C.M.R. ch. 117]

A. All control equipment downtimes and malfunctions. Control equipment on each combustion turbine CT#1, CT#2, and CT#3 includes the following:
   1. Water Injection Systems
   2. SCR Systems; and
   3. Oxidation Catalysts.

B. All CEMS downtimes and malfunctions;

C. All parameter monitor downtimes and malfunctions;

D. All excess events of emission and operational limitations set by this Order, Statute, and state or federal regulations, as appropriate. The following information shall be reported for each excess event:

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

E. A report certifying there were not excess emissions, if that is the case.

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

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

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

(25) **Annual Compliance Certification**
[06-096 C.M.R. ch. 140]

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

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on 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.

(26) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, the licensee 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 either by a computer program and accompanying instructions that are supplied by the Department, or by a written emission statement containing the information required in 06-096 C.M.R. ch. 137. [06-096 C.M.R. ch. 137]

(27) **Acid Rain**

Pixelle Cogen shall continue to comply with the federal Acid Rain Program, *State Operating Permits Program,* 40 C.F.R. Part 70 and *Permits Regulation,* 40 C.F.R. Part 72, in accordance with the Phase II acid rain permit, A-718-70-A-S, issued on November 12, 1998.

(28) **$CO_2$ Budget Source**

Pixelle Cogen shall continue to comply with the requirements of license A-718-78-A-N, issued January 5, 2009, per Maine's *$CO_2$ Budget Trading Program*, 06-096 C.M.R. ch. 156 for Combustion Turbines #1, #2, and #3. [06-096 C.M.R. ch. 156] **Enforceable by State-only**

(29) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

| Origin and Authority | Requirement Summary | Enforceability |
|---|---|---|
| 06-096 C.M.R. ch. 102 | Open Burning | - |
| 06-096 C.M.R. ch. 109 | Emergency Episode 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 |

(30) **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 CFC's. [40 C.F.R. Part 82, Subpart F]

(31) **Risk Management Plan**

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

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

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

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

(33) **New Source Review**

Pixelle Cogen 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-718-70-F-R/A, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 14th DAY OF JUNE, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:____________________________________ for ______
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.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 7, 2017
Date of application acceptance: December 18, 2017

Date filed with the Board of Environmental Protection:

This Order prepared by Patric J. Sherman, Bureau of Air Quality.

FILED
JUN 14, 2021
State of Maine
Board of Environmental Protection