

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

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VERSION DATE 10/31/2023

# AIR QUALITY DRAFT OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

**ISSUED TO** ["the Permittee"]:

Milford Power, LLC

#### **INFORMATION RELIED UPON:**

Application No. 22-AQ14-0007-REN ePlace Authorization No. AQ14-0000074 Transmittal No. 108028 Approval No. CE-21-012 Acid Rain Permit No. 054805

FACILITY LOCATION: 108 National Street, Milford, MA 01757

**NATURE OF BUSINESS:** Fossil Fuel Electrical Power Generation

**RESPONSIBLE OFFICIAL:** Name: Kevin Collins Title: Asset Manager

#### FACILITY IDENTIFYING NUMBERS:

AQ ID: 1201504 SMS Site (FMF FAC) NO.: 204932 SMS RI (FMF RO) NO.: 194082

Standard Industrial Classification (SIC): 4911 North American Industrial Classification System (NAICS): 221112

#### FACILITY CONTACT PERSON:

Name: Christopher Teta Title: Plant Manager Phone: 508-482-7402 Email: Christopher.Teta@naes.com

This Operating Permit shall expire on \_\_\_\_\_ D

DRAFT

For the Department of Environmental Protection

Permit Chief, Bureau of Air and Waste

DRAFT

Date

This information is available in alternate format. Contact Melixza Esenyie at 617-626-1282. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep

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# SPECIAL CONDITIONS FOR OPERATING PERMIT

## 1. <u>PERMITTED ACTIVITIES</u>

In accordance with the provisions of 310 CMR 7.00: Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00: Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

### A. <u>DESCRIPTION OF FACILITY AND OPERATIONS</u>

The Milford Power, LLC ("Milford Power" or "Facility") site is located on National Street in Milford, MA. Milford Power currently owns and operates a nominal 202-megawatt ("MW")<sup>1</sup> natural gas-fired combustion turbine combined cycle ("EU-1") electrical generating facility. The property has been used for power generation since 1993.

The Facility consists of a Siemens 501D-5 Combustion Turbine Generator ("CTG"), A Nooter-Erickson Heat Recovery Steam Generator ("HRSG") that include a duct burner ("DB"), a Siemens Steam Turbine Generator ("STG"), a 4-cell wet mechanical cooling tower, a water treatment system and auxiliary equipment.

The CTG combusts natural gas to generate electricity. The waste heat exhaust gases from the CTG are directed to the HRSG, which is also equipped with a DB that combusts natural gas. Steam generated in the HRSG is directed to a STG where additional electricity is generated. Low pressure steam is condensed through a surface condenser cooled by a 4-cell wet mechanical cooling tower. The CTG and DB exhaust to a 125-foot-tall stack.

The combustion of natural gas results in emissions of nitrogen oxides (" $NO_x$ "), sulfur dioxide (" $SO_2$ "), carbon monoxide ("CO"), carbon dioxide (" $CO_2$ "), volatile organic compounds ("VOC"), particulate matter ("PM"), sulfuric acid (" $H_2SO_4$ "), and trace amounts of hazardous air pollutants ("HAP") such as formaldehyde. The use of air pollution control equipment and good combustion practices minimizes these pollutants. The CTG utilizes steam injection to reduce  $NO_x$  emissions and the HRSG includes a multi-pollutant catalyst for the reduction of  $NO_x$ , CO, and VOC, and HAP emissions from the CTG and duct burner. Typically, PM is generated from hydrocarbons that are not fully combusted. PM may also result from ammonium salts formed by the reaction of sulfuric acid mist ("SAM") and ammonia slip from the catalyst system. The SO<sub>2</sub> emission rate for natural gas is based on the current permitted value for sulfur content for the natural gas at 0.5 grains per 100 cubic foot (grains/100 CF).

The Facility is a non-major area source of HAPs because it emits less than the major source thresholds of 10 tons per year ("TPY") for a single HAP and 25 TPY for all HAPs combined.

<sup>&</sup>lt;sup>1</sup> Rating at International Standards Organization ("ISO") conditions for combustion turbines equal to atmospheric pressure sea level 14.7 PSIA, 59 degrees Fahrenheit and 60 percent relative humidity.

A 29% solution of the aqueous NH<sub>3</sub> used as the reducing agent in the Facility's catalyst is stored onsite in an aboveground 15,000-gallon storage tank. The Facility administratively controls the aqueous NH<sub>3</sub> storage tank level to ensure the system is below the 112(r) Accidental Release Prevention Risk Management Program applicability threshold.

Other major components associated with the Facility include: a turbine building, a water treatment building, a 500,000-gallon city water storage tank, and a 300,000-gallon demineralized water storage tank. A redundant electrical connection negates the need for diesel generators or fire pumps.

#### B. <u>PERMITTING HISTORY</u>

The Facility has had several permits issued and modified since the original approval. A summary of these permits, modifications, and changes is presented below:

- Plan Approval No. C-B-91-003 was issued October 16, 1991, to Enron Power and Milford Power Limited Partnership.
- Carbon Dioxide Budget Trading Program Emission Control Plan Tr. No. X223662 issued December 26, 2008.
- Acid Rain Permit application was submitted June 13, 2008, amended November 5, 2008, and which was in effect from January 1, 2009, through December 31, 2013, or until incorporated into the Operating Permit (OP).
- OP Transmittal No. 108028 was issued October 21, 2004. An OP Renewal Application (Tr. No. X227921) was submitted April 10, 2009.
- Limited Plan Approval Tr. No. X236154 was issued January 14, 2011, to Milford Power, LP and amended April 6, 2011, incorporating start up and shutdown (SU/SD) emission limits.
- Non-Major Comprehensive Plan Approval Application No. CE-17-030 (ePlace Authorization No. AQ-02P-000004) was issued on July 13, 2018, approving the installation of wet compression on the CTG and a duct burner in the HRSG. In addition, the following changes were included in the 2018 Approval:
  - 1. Adding the cooling tower as a discrete emission unit (EU-2).
  - 2. Clarifying the CTG SU/SD emissions averaging method.
  - 3. Adding definitions of Protective Action (PA) and Extended Startup.
  - 4. Updating the Continuous Emission Monitoring (CEM) language.
  - 5. Adding SAM emission limits; and
  - 6. Expanding the definition of PM.

AQ-02P-000004 superseded in its entirety Plan Approval C-B-91-003 and Limited Plan Approval Tr. No. X236154.

- Non-Major Comprehensive Plan Approval Application No. CE-21-012 (ePlace Authorization No. AQ02F-0000074) was issued on November 12. 2021, correcting the carbon dioxide equivalent (CO2e) emission rate and limits.
- An updated OP Renewal Application (22-AQ14-0007-REN) was submitted on May 14, 2022, for

TR No. 108028, to incorporate changes approved in Air Quality Plan Approval AQ02F-0000074 and to update and enter the previously submitted timely Operating Permit Renewal Application that expired on October 20, 2009, into the new MassDEP online application system.

Air Quality Plan Approval (AQPA) AQ02F-0000074 superseded in its entirety AQPA AQ-02P-000004. AQPA AQ02F-0000074 was relied upon and, in conjunction with the Operating Permit Renewal Application dated May 14, 2022, is the basis for this Operating Permit Renewal.

#### C. <u>NON-MAJOR SOURCE DETERMINATION</u>

The Facility is a non-major source pursuant to 310 CMR 7.00: Appendices A. Emissions Offsets and Nonattainment Review and C. Operating Permit Program since potential emissions do not equal or exceed the regulatory thresholds.<sup>2</sup>

The Facility is not a major stationary source pursuant to the Prevention of Significant Deterioration (PSD) regulations of 40 Code of Federal Regulations (CFR) 52.21 since potential emissions are less than 100 tons per year of a new source review regulated pollutant.

The Facility is a natural area source of hazardous air pollutants (HAPs) due to its potential to emit HAPs is less than the major source thresholds of 10 tons per year for a single HAP and 25 tons per year for all HAPs combined.

#### D. <u>310 CMR 7.00: Appendix C: Operating Permit Program Applicability</u>

Although the Facility is below major thresholds for criteria pollutants and HAP, it is subject to the Operating Permit Program requirements in 310 CMR 7.00: Appendix C (also referred to as a Title V permit) because it is subject to a New Source Performance Standard (NSPS) 40 CFR 60 subpart KKKK and is an affected source as defined in 42 U.S.C.7401, Title IV (Acid Rain provisions).

#### E. <u>APPLICABLE REGULATORY REQUIREMENTS</u>

#### 1. Federal Requirements

The Facility is not subject to 40 CFR 64 Compliance Assurance Monitoring ("CAM") requirements because it uses a Continuous Emissions Monitoring System ("CEMS") and therefore is exempt under 40 CFR 64.2(b)(1)(vi).

#### New Source Performance Standards (NSPS)

The Permittee shall comply with Federal New Source Performance Standards (NSPS) 40 CFR 60 Subparts A and KKKK - Standards of Performance for Stationary Combustion Turbines for Emission Unit (EU) 1. The duct burner modification completed on May 16, 2019, changed the NSPS applicability from Subpart GG to Subpart KKKK.

<sup>&</sup>lt;sup>2</sup> Appendix A: 50 tons per year of VOC; 50 tons per year of NOx, Appendix C: 50 tons per year VOC; 50 tons per year of NOx; 10 tons per year of any hazardous air pollutant (HAP) subject to 42 U.S.C. 7401 § 112, 25 tons per year of any combination of HAPs; or 100 tons per year of any regulated air pollutant, excluding GHGs.

#### Federal Acid Rain Program

The Permittee is subject to the requirements of Phase II of the Federal Acid Rain Program for EU1 defined by EPA in 40 CFR Part 72 and 40 CFR Part 75.

Pursuant to 40 CFR Part 72.71, 40 CFR Part 72.73, and 310 CMR 7.00: Appendix (C)(3)(n), MassDEP is the permitting authority for Phase II Acid Rain Permits. The Permittee was issued the initial Phase II Acid Rain Permit on January 1, 2009.

The Department is incorporating the requirements of the renewal Phase II Acid Rain Permit into this Operating Permit. The Phase II Acid Rain requirements will renew in the Operating Permit.

#### 2. State Requirements

The Facility is not subject to Reasonably Available Control Technology (RACT) for Sources of Oxides of Nitrogen (NOx) because it does not emit 50 tons per year or more of NOx as listed in CMR 7.19(1)(c).

#### Massachusetts CO2 Budget Trading Program

The Permittee is subject to the requirements of the Massachusetts  $CO_2$  Budget Trading Program for EU1 as defined by MassDEP in 310 CMR 7.70(1)(d).

Pursuant to 310 CMR 7.70(3), the Permittee was issued a CO2 Budget Program Emissions Control Plan (ECP), Transmittal. X223662 on December 26, 2008. In accordance with 310CMR 7.70(8)(a), the owner or operator shall install, maintain, operate, and report emissions data from a CO2 emissions monitoring system. (State Only Requirement).

#### Massachusetts Greenhouse Gas Reporting Program

The Permittee is subject to the requirements of Greenhouse Gas Emissions Reporting as defined by MassDEP in 310 CMR 7.71(3)(a). (State Only Requirement).

Pursuant to 310 CMR 7.71(2): Definitions:

"Greenhouse Gas" means any chemical or physical substance that is emitted into the air and that MassDEP may reasonably anticipate will cause or contribute to climate change including, but not limited to, CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and any other gas for which 40 CFR Part 98 includes a method for calculating greenhouse gas emissions from any stationary emissions source.

#### Massachusetts NOx Ozone Season Program (MassNOx)

The Permittee is subject to the requirements of the Massachusetts  $NO_X$  Ozone Season Program (Mass $NO_X$ ) regulation for EU1 as defined by MassDEP in 310 CMR 7.34(7)(b).

If the Department determines that the state-wide budget of 1,799 tons of NO<sub>X</sub> per ozone season, is exceeded during any ozone season, 2018 or after, the Permittee may be required to offset all NO<sub>x</sub> emissions beyond the NO<sub>X</sub> emissions budget contained in 310 CMR 7.34(7)(b):*Table A* in accordance with 310 CMR 7.34(8).

#### **Reducing CO2 Emissions from Electricity Generating Facilities**

The Permittee is subject to the requirements of the Reducing CO2 Emissions from Electricity Generating Facilities regulation for EU1 as defined by MassDEP in 310 CMR 7.74(3).

The Permittee shall comply with the CO2 emissions limits contained in 310 CMR 7.74(5) for calendar year 2018 and each year thereafter. The Permittee may offset all CO2 emissions using allowances in the facility allowance registry account in accordance with 310 CMR 7.74(6)(b) or request deferred compliance due to an emergency in accordance with 310 CMR 7.74(6)(d). (State **Only Requirement**).

### 2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

EU	Description of EU	EU Design Capacity	Pollution Control Device (PCD)
1	Combustion Turbine Generator ("CTG") with wet compression <sup>1</sup>	1,401 MMBtu/hr (HHV) @ 22°F from CTG	Steam injection for NO <sub>x</sub> control and a multipollutant catalyst for NO <sub>x</sub> and CO/VOC control
	HRSG with Duct Burner	544.46 MMBtu/hr from Duct Burner (HHV)	Multipollutant catalyst for $NO_X$ and $CO/VOC$ control
2	Four Cell Cooling Tower	38,000 gpm circulating water	Drift Eliminator that allows less than 0.001% drift

### Table 1

#### Table 1 Key:

EU = Emission Unit	PCD = Pollution Control Device
CO = Carbon monoxide	MMBtu/hr = millions of British thermal units per hour
CTG = Combustion Turbine Generator	$NO_X = Nitrogen oxides$
gpm = Gallons per minute	VOC = Volatile organic compounds
HHV = High heating value	(a) = at
HRSG = Heat Recovery Steam Generator	°F = Degrees Fahrenheit
% = Percent	-

#### Table 1 Footnote:

1. Wet compression is only used when ambient temperatures are 60°F or greater.

# 3. IDENTIFICATION OF EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

### Table 2

Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00: Appendix C(5)(h)

Table 2 Key:

CMR = Code of Massachusetts Regulations

MassDEP = Massachusetts Department of Environmental Protection

### 4. <u>APPLICABLE REQUIREMENTS</u>

### A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Table 3A and 3B below:

EU	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards <sup>3</sup>	Applicable Regulation and/or Approval No
		Operation at ≥ MECL <sup>5</sup> excluding startups, shutdowns, and protective action.	NO <sub>X</sub>	<ul> <li>2 ppmvd @ 15% O<sub>2</sub></li> <li>0.0074 lb/MMBtu</li> <li>10.37 lb/hr CTG only</li> <li>14.40 lb/hr CTG+DB</li> </ul>	AQ02F-0000074
12	$1^{2}$ Natural Gas Heat Input $\leq 1$ , MMBtu HHV I rolling 12-mon	Heat Input ≤ 1,066,000 MMBtu HHV per		• 15 ppm @ 15% O <sub>2</sub> <sup>4</sup>	40 CFR Part 60 Subpart KKKK
		rolling 12-month period from Duct Burner.		<ul> <li>76 tons of NOx per Ozone Season<sup>6</sup></li> </ul>	310 CMR 7.34(7)(b): <i>Table A</i>
		Natural Gas firing only.	Sulfur content in natural gas fuel	• < 0.5 gr/100 scf	AQ02F-0000074, 40 CFR Part 60 Subpart KKKK

Table 3A<sup>1</sup>

EU	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards <sup>3</sup>	Applicable Regulation and/or Approval No
	Natural Gas	Operation at ≥ MECL <sup>5</sup> excluding startups, shutdowns, and protective action. Heat Input ≤ 1,066,000 MMBtu HHV per rolling 12-month period from Duct Burner. Natural Gas firing only.	$SO_2$	<ul> <li>0.0014 lb/MMBtu</li> <li>2.00 lb/hr CTG only</li> <li>2.78 lb/hr CTG+DB</li> </ul>	AQ 02F-0000074
			$\mathrm{H}_2\mathrm{SO}_4$	<ul> <li>0.0011 lb/MMBtu</li> <li>1.53 lb/hr CTG only</li> <li>2.13 lb/hr CTG+DB</li> <li>2 ppmvd @ 15% O<sub>2</sub></li> <li>0.0045 lb/MMBtu</li> <li>6.30 lb/hr CTG only</li> <li>8.75 lb/hr CTG+DB</li> </ul>	AQ 02F-0000074
			СО		AQ 02F-0000074
			NH3	<ul> <li>2 ppmvd @ 15% O<sub>2</sub></li> <li>0.0027 lb/MMBtu</li> <li>3.78 lb/hr CTG only</li> <li>5.25 lb/hr CTG+DB</li> </ul>	AQ 02F-0000074
12			VOC	<ul> <li>0.0065 lb/MMBtu CTG only</li> <li>9.04 lb/hr CTG only</li> <li>0.0088 lb/MMBtu CTG+DB</li> <li>17.20 lb/hr CTG+DB</li> </ul>	AQ 02F-0000074
			PM/PM <sub>10</sub> /PM <sub>2.5</sub> (condensable and filterable)	<ul> <li>0.01 lb/MMBtu</li> <li>14.01 lb/hr CTG only</li> <li>19.45 lb/hr CTG+DB</li> </ul>	AQ 02F-0000074
			CO <sub>2</sub> e	<ul> <li>124 lb/MMBtu</li> <li>177,198 lb/hr CTG only</li> <li>246,062 lb/hr CTG+DB</li> </ul>	AQ 02F-0000074
	All	NA	CO2	The Permittee shall hold $CO_2$ allowances in a compliance account in an amount not less than the $CO_2$ Budget Emissions Limitation.	310 CMR 7.70(1)(e)3 (State Only Requirement)
				The Permittee shall hold $CO_2$ allowances in an allowance registry account in an amount equal to or greater than the sum of either: (1) The prior calendar year $CO_2$ emissions, minus any emissions for which compliance is deferred in accordance with 310 CMR 7.74(6)(d); or (2) Twice the amount of $CO_2$ emissions emitted during the year before the prior calendar year if compliance was deferred pursuant to 310 CMR 7.74(6)(d).	310 CMR 7.74(6)(e) (State Only Requirement)

EU	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards <sup>3</sup>	Applicable Regulation and/or Approval No
12	All		$SO_2$	The Permittee shall hold $SO_2$ allowances, as of the allowance transfer deadline, in the Permittee's compliance account not less than the total annual emissions of $SO_2$ for the previous calendar year; and comply with the applicable Acid Rain emissions limitations for $SO_2$ .	310 CMR 7.00: Appendix C(3)(n); 40 CFR 72.9; Acid Rain Permit effective 01/01/2009 [ORIS NO: 054805]
		NA	NOx	NA	310 CMR 7.00: Appendix C(3)(n); Acid Rain Permit effective 01/01/2009 [ORIS NO: 054805]
2	NA	<ul> <li>Circulating Water Flow ≤ 38,000 gpm</li> <li>3,500 mg/L total dissolved solids</li> <li>Drift ≤ 0.001%</li> </ul>	PM/PM <sub>10</sub> /PM <sub>2.5</sub> (filterable only)	<ul> <li>0.67 lb/hr</li> <li>2.9 TPY</li> <li>0.24 TPM</li> </ul>	AQ 02F-0000074
			Greenhouse Gas <sup>7</sup>	NA	310 CMR 7.71 (State Only Requirement)
			NO <sub>X</sub>	49.4 TPY 13.2 TPM	AQ 02F-0000074
			СО	30.0 TPY 4.7 TPM	AQ 02F-0000074
			$SO_2$	9.5 TPY 1.0 TPM	AQ 02F-0000074
Facility-	All	NA	H <sub>2</sub> SO <sub>4</sub>	7.3 TPY 0.8 TPM	AQ 02F-0000074
wide	All	NA	VOC	47.6 TPY 6.4 TPM	AQ 02F-0000074
			PM/PM <sub>10</sub> /PM <sub>2.5</sub>	69.6 TPY 7.5 TPM	AQ 02F-0000074
			CO <sub>2</sub> e <sup>8</sup>	780,800 TPY 86,235 TPM	AQ 02F-0000074
			NH <sub>3</sub>	18.0 TPY 2.3 TPM	AQ 02F-0000074
		HAP (Sing	HAP (Total)	5.14 TPY 0.8 TPM	AQ 02F-0000074
			HAP (Single) formaldehyde	2.25 TPY 0.4 TPM	AQ 02F-0000074
			Opacity	10%	AQ 02F-0000074

#### Table 3A Key:

EU = Emission Unit CO = Carbon Monoxide CO <sub>2</sub> e = Carbon Dioxide Equivalent	$NO_X = Nitrogen Oxides$ $CO_2 = Carbon Dioxide$ $H_2SO_4 = Sulfuric Acid Mist$
PM = Total Particulate Matter	$PM_{10} = Particulate Matter less than or equal to 10 microns in diameter$
$PM_{2.5}$ = Particulate Matter less than or equal to 2.5 microns in diameter	VOC = Volatile Organic Compound
HAP (single) = Maximum single Hazardous Air Pollutant NH <sub>3</sub> = Ammonia	HAP (total) = Total Hazardous Air Pollutant SO <sub>2</sub> = Sulfur Dioxide
HHV = Higher Heating Value DB = Duct Burner	MECL = Minimum Emissions Compliance Load CTG = Combustion Turbine Generator
TPY = Tons per consecutive 12-month period9	TPM = Tons per month
gr/100 scf = Grain per hundred standard cubic feet lbs/MMBtu = Pounds per Million British thermal units	lbs/hr = Pounds per hour ppmvd @ 15% $O_2$ = Parts per million by volume,
gpm = Gallons per minute	corrected to 3 percent oxygen $\leq$ = Less than or equal to
% = Percent	+= and

#### **Table 3A Foot Notes:**

- 1. The Table 3A EU 1 emission limits apply at all times except during startup, shutdown, or protective action. Emission limits for these exceptions are provided in Table 3B below.
- 2. The Permittee shall comply with the ppm @ 15% O<sub>2</sub>, lb/MMBtu, and lb/hr emission limits in Table 3A based on a one-hour block average unless otherwise noted.
- 3. The "CTG Only" emission limits apply when only the CTG is operating. The "CTG+DB" emission limits shall apply when both the CTG and the DB are firing.
- 4. The Facility will meet the NO<sub>x</sub> limit on a 30-day rolling basis in 40 CFR 60 KKKK.
- 5. Minimum Emissions Compliance Load (MECL) shall be determined during the initial emissions compliance testing to be performed within 180 days after initial firing.
- 6. If the Department determines that the state-wide budget of 1,799 tons of NO<sub>X</sub> per ozone season, is exceeded during any ozone season, 2018 or after, the Permittee may be required to offset all NO<sub>x</sub> emissions beyond the NO<sub>X</sub> emissions budget contained in 310 CMR 7.34(7)(b):*Table A* in accordance with 310 CMR 7.34(8).
- 7. Greenhouse Gas means any chemical or physical substance that is emitted into the air and that MassDEP may reasonably anticipate will cause or contribute to climate change including, but not limited to: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and any other gas for which 40 CFR Part 98 includes a method for calculating greenhouse gas emissions from any stationary emissions source.
- 8. For compliance demonstration purposes, the CO<sub>2</sub>e tons per month (TPM) and tons per year (TPY) emissions are calculated based on an average CO<sub>2</sub>e emission factor of 118.98 lb/MMBtu. The 118.98 lb CO<sub>2</sub>e/MMBtu emission factor was calculated in accordance with 40 CFR 98 Subpart D as follows: (118.86 lb CO<sub>2</sub> as CO<sub>2</sub>e/MMBtu [CO<sub>2</sub> by equation G-4 in Appendix G to Part 75 \* Global Warming Potential ("GWP") from Part 98 of 1]) + (0.05513 lb CH<sub>4</sub> as CO<sub>2</sub>e/MMBtu [from Table C-2 Subpart C to Part 98 \* GWP 25]) + (0.06571 lb N<sub>2</sub>O as CO<sub>2</sub>e/MMBtu [from Table C-2 in Subpart C to Part 98 \* GWP 298]).
- 9. To calculate the amount of a consecutive 12-month rolling period take the current calendar month amount and add it to the previous 11 calendar months total amount.

	Startup, Shutdown, and Protective Action Emission Limits						
EU	Pollutant         Startup <sup>1,5</sup> Extended Start <sup>2</sup> Shutdown <sup>3,5</sup> Protective Action <sup>4</sup>						
1	NO <sub>x</sub>	1,380 lb/event	1,900 lb/event	70 lb/event	1,170 lb/event		
	CO	170 lb/event	230 lb/event	260 lb/event	290 lb/event		
	NH <sub>3</sub>	35 lb/event	50 lb/event	10 lb/event	30 lb/event		
	Hours per event	3	6	1	4		

#### Table 3B Key:

EU = Emission Unit CO = Carbon Monoxide lb/event = Pound per event

NO<sub>X</sub> = Nitrogen Oxides NH<sub>3</sub> = Ammonia

#### Table 3B Foot Notes:

- 1. Startup See Table 8 condition 1a.
- 2. Extended Start See Table 8 condition 1a.
- 3. Shutdown See Table 8 condition 1b.
- 4. Protective Action See Table 8 condition 1c.
- 5. Start-ups include the time from flame-on in the combustor until the minimum emissions compliance load (MECL) is reached. Shutdowns include the time from dropping below the MECL until flame-out.

#### B. <u>COMPLIANCE DEMONSTRATION</u>

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Tables 3A and 3B.

Table 4

EU	Monitoring And Testing Requirements
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall install, calibrate, and test continuous emission monitors (CEMS) and a data acquisition system (DAS) in an accurate operating condition to continuously measure and record the levels of oxygen, nitrogen oxides, carbon monoxide, and ammonia.</li> </ol>
	2. In accordance with AQ02F-0000074, the Permittee shall ensure that the CEMS and recording equipment comply with MassDEP approved performance and location specifications. Notwithstanding the requirements of 40 CFR 60 Subpart KKKK, the equipment shall conform with the EPA monitoring specifications in 40 CFR 60.13 and 40 CFR 60 Appendices B and F, and all applicable portions of 40 CFR 72 and 75.
	3. In accordance with AQ02F-0000074, unless specified otherwise, the Permittee shall use and maintain its CEMS system as a "direct-compliance" monitor to measure NOx, CO, O2 and NH3 at all times. 'Direct-compliance' monitors generate data that legally documents the compliance status of a source. The MassDEP shall utilize the data generated by the 'direct-compliance' monitors, MassDEP recognized emission testing, or other credible evidence for compliance and enforcement purposes.
	4. In accordance with AQ02F-0000074, the Permittee shall operate each CEM at all times when the emission unit is operational except for periods of CEM calibration checks, zero and span adjustments, preventative maintenance, and periods of malfunction.
	5. In accordance with AQ02F-0000074, the Permittee shall obtain and record emission data from each unit for at least ninety-five (95) percent of each emission unit's operating hours per quarter, except for periods of CEMs calibration checks, zero and span adjustments.
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall equip the CEMS with audible and visible alarms. The Permittee shall set the alarms to activate when emissions are within 5% of the lb/hr emission limits in Tables 3A and 3B of this Plan Approval.</li> </ol>
1	7. In accordance with AQ02F-0000074, the Permittee shall comply with all the applicable monitoring requirements in 40 CFR 72 and 75 (Acid Rain Program). The Permittee shall conduct a relative accuracy test audit ("RATA") for all CEMS in accordance with the procedures in 40 CFR 60 Appendices B and F and 40 CFR 75 Appendices A and B. The Permittee shall submit a proposed RATA protocol 30 days before testing unless there are no changes from a previously submitted RATA protocol. The Permittee shall submit a final RATA report within 60 days of completion of RATA.
	<ol> <li>In accordance with AQ02F-0000074, the Permittee comply with the requirements in 40 CFR 75 to monitor and record natural gas consumption (ft3/day) and total fuel heat input (MMBtu) in accordance with 40 CFR Part 75.</li> </ol>
	9. In accordance with AQ02F-0000074, the Permittee shall monitor the date and daily hours of operation, the total hours of operation per month and twelve-month rolling period for the duct burner (at full-load equivalent) and the CTG, and the heat input per rolling 12-month period from Duct Burner.
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall not operate below MECL except during startup, shutdown, or protective action periods.</li> </ol>
	11. In accordance with AQ02F-0000074, the Permittee shall consider that the VOC emissions shall be considered as occurring at the rate determined in the most recent compliance test for start-up /shutdown conditions whenever the combustion turbine is operating below the MECL for start-up and shutdown.
	<ul> <li>12. In accordance with AQ02F-0000074, the Permittee shall consider VOC emissions as meeting emission limits contained in this Plan Approval if the combustion turbine is operating at the MECL or greater, and if its CO emissions are below the CO emission limit at the given combustion turbine operating conditions, subject to the established correlation.</li> </ul>
	<ul> <li>13. In accordance with AQ02F-0000074, the Permittee shall monitor the sulfur content of the natural gas combusted in accordance with 40 CFR Part 60 Subpart KKKK, 40 CFR 75 Appendix D section 2.3 as appropriate or pursuant to any alternative fuel monitoring schedule.</li> </ul>
	14. In accordance with AQ02F-0000074, the Permittee shall install and operate monitors fitted with alarms to continuously monitor the temperatures at the inlets to the SCR and oxidation catalyst. In addition, the Permittee shall monitor the combustion turbine inlet and ambient temperatures.
	15. In accordance with AQ02F-0000074, the Permittee shall install and continuously operate a differential pressure instrument to monitor the pressure across the catalyst.

EU	Monitoring And Testing Requirements
	16. In accordance with AQ02F-0000074, the Permittee shall install and continuously operate high- and low-level audible alarm monitors on the NH3 storage tank and shall ensure that they are properly maintained. The Permittee shall maintain high and low ammonia tank level indicators. The ammonia tank level indicators shall be equipped with an audible alarm that sounds in the control room and near the ammonia tank. The high- and low-level ammonia tank level indicators set points shall be set to warn operators at 90% full at the high level and within 10% of empty.
	17. In accordance with AQ02F-0000074, the Permittee shall monitor the SO2 and CO2 emissions in accordance with 40 CFR Part 75.
	18. In accordance with AQ02F-0000074, the Permittee shall monitor the Greenhouse Gas emission rate utilizing the calculation procedures in 40 CFR Part 98 Subpart A, Table A-1.
	19. In accordance with AQ02F-0000074, the Permittee shall continuously monitor the net electrical output of the Facility to the grid.
	20. In accordance with AQ02F-0000074, the Permittee shall conduct a visual inspection of the SCR equipment and ammonia injection grid ("AIG") annually to ensure that good ammonia vaporization and distribution is occurring. All control components shall be inspected including but not limited to the condition of the catalyst structure, intact insulation, tight modules and fasteners, clear AIG nozzles, tight AIG piping and fasteners and minimal deposit on and around the grid indicating there is good vaporization at the grid
1	<ul> <li>vaporization at the grid.</li> <li>21. In accordance with AQ02F-0000074, the Permittee shall take a representative sample of the SCR media at least every 5 years to evaluate and analyze the effectiveness of the media.</li> </ul>
	<ul> <li>22. In accordance with AQ02F-0000074, the Permittee shall maintain the Facility so as to accommodate the emissions testing requirements of this Plan Approval. All emissions testing will be conducted in</li> </ul>
	accordance with the MassDEP's "Guidelines for Source Emissions Testing" and in accordance with the Environmental Protection Agency tests as specified in the 40 CFR 60, Appendix A, 40 CFR 60 Subpart KKKK, 40 CFR 72 and 75, or by another method which has been correlated to the above method to the satisfaction of the MassDEP.
	23. In accordance with 310 CMR 7.34(3) the Permittee shall comply with all monitoring and testing requirements for ozone season NO <sub>x</sub> emissions. The requirements of 310 CMR 7.34(3) shall not affect the responsibility of the Permittee to monitor emissions of other pollutants from or other emissions characteristics of EU1.
	<ul> <li>24. In accordance with 310 CMR 7.34(4)(b) the Permittee shall electronically submit and certify a Quarterly NO<sub>X</sub> report to EPA within 30 days following the end of the calendar quarter that falls during the ozone season (May 1st – September 30th).</li> </ul>
	25. In accordance with 310 CMR 7.70(8) and Tr. No. X223662 the Permittee shall comply with all monitoring and testing requirements for annual CO2 emissions, net electrical output, and net steam output. (State Only Requirement).
	<ul> <li>26. In accordance with 40 CFR 72.9, 40 CFR Part 75, and the Acid Rain Permit effective 01/01/2009</li> <li>[ORIS NO: 054805], the Permittee shall comply with all monitoring requirements for NOx and SO2 emissions. The requirements of 40 CFR Part 75 shall not affect the responsibility of the Permittee to monitor emissions of other pollutants from or other emissions characteristics of EU1.</li> </ul>
2	27. In accordance with 310 CMR 7.00 Appendix C.(9), the Permittee shall monitor the total dissolved solids of the circulating water at least semi-annually to demonstrate compliance with the limit.
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration and 310 CMR 7.71 Greenhouse Gas Reporting.</li> </ol>
	29. In accordance with AQ02F-0000074, if and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.
Facility- wide	30. In accordance with 310 CMR 7.12(3)(c), Copies of Source Registration and other information supplied to the Department, to comply with 310 CMR 7.12 shall be retained by the facility owner/operator for five wears from the date of sylmitted.
	<ul> <li>five years from the date of submittal.</li> <li>31. In accordance with AQ02F-0000074, at least 30 days prior to emission testing, the Permittee shall submit to MassDEP for written approval a stack emission pretest protocol.</li> </ul>
	<ul> <li>32. In accordance with AQ02F-0000074, within 60 days after emission testing, the Permittee shall submit to MassDEP a final stack emission test results report.</li> </ul>

EU	Monitoring And Testing Requirements	
Facility- wide	33. In accordance with 310 CMR 7.71(1) and Appendix C(9) the Permittee shall establish and maintain data systems or record keeping practices (e.g. fuel use records, SF6 usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c. 298, § 6. (State Only Requirement).	
	34. In accordance with 310 CMR 7.74(8) the Permittee shall keep on site at the source all records required under 310 CMR 7.74, for a period of 3 years, unless otherwise required by MassDEP. (State Only Requirement).	

### Table 4 Key:

EU = Emission Unit CO = Carbon Monoxide	$NO_x = Nitrogen Oxides$ $SO_2 = Sulfur Dioxide$
PM = Total Particulate Matter	$PM_{10} = Particulate Matter less than or equal to 10 microns in diameter$
$PM_{2.5}$ = Particulate Matter less than or equal to 2.5 microns in diameter	VOC = Volatile Organic Compounds
$NH_3 = Ammonia$	$O_2 = Oxygen$
% = Percent	ppmvd = Parts per million
CEMS = Continuous Emission Monitors	CFR = Code of Federal Regulations
CMR = Code of Massachusetts Regulations	RATA = Relative accuracy test audit
EPA = Environmental Protection Agency	MassDEP = Massachusetts Department of Environmental Protection
SCR = Selective catalytic reduction	DAS = Data Acquisition System

# Table 5

EU	Record Keeping Requirements	
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall maintain on site the following records for five (5) years from the date of generation and have the records readily available to the Department and EPA personnel:         <ul> <li>a. All CEM data in block hour intervals</li> <li>b. Operating and maintenance logbooks, which must contain the following information by calendar day:                 <ul></ul></li></ul></li></ol>	
1	<ul> <li>iv. Date, time and specifications of repairs, maintenance and inspections performed on the CTG, HRSG, SCR/CO catalyst system including offline catalyst cleaning, AIG and CEMS</li> <li>v. Fuel consumption</li> <li>c. Name of company delivering the ammonia including at a minimum, date of delivery, amount of ammonia (gallons), and truck identification number.</li> <li>d. Calibration of all monitoring devices, date, time, and who performed the calibrations.</li> </ul>	
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall maintain records of the emission unit's hourly fuel heat input rate (MMBtu/hr, HHV), total fuel heat input (MMBtu), and natural gas consumption daily (ft<sup>3</sup>/day), monthly and twelve-month rolling period basis.</li> </ol>	
	3. In accordance with AQ02F-0000074, the Permittee shall maintain records of the daily readings of the pressure drop across the catalyst on site.	
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall continuously estimate and record VOC emissions on the DAHS using the CO/VOC correlation curve developed from the most recent compliance test.</li> </ol>	
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall continuously estimate and record PM, PM10 PM2.5 emissions on the DAHS using the surrogate methodology or parametric monitoring derived fre the most recent compliance test.</li> </ol>	

EU	Record Keeping Requirements
	5. In accordance with AQ02F-0000074, the Permittee shall maintain all records required by 310 CMR 7.70, 310 CMR 7.71 (Reporting of Greenhouse Gas Emissions), and 40 CFR Part 98 (Mandatory Greenhouse Gas Emissions Reporting) at the Facility.
	7. In accordance with AQ02F-0000074 and 40 CFR 52.21(r)(6)(iii) and 310 CMR 7.00: Appendix A(2)(b), the Permittee shall calculate and maintain a record of annual emissions, in tons per year on a calendar basis, for a period of 10 years following resumption of regular operations after installation of the Duct Burner.
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall maintain records of net electrical output to the grid from the Facility daily.</li> </ol>
	9. In accordance with AQ02F-0000074, the Permittee shall maintain records of the sulfur content of the natural gas combusted by EU1 at the frequency required pursuant to 40 CFR Part 60 Subpart KKKK, or pursuant to any alternative fuel monitoring schedule issued in accordance with 40 CFR Part 60 Subpart KKKK.
	0. In accordance with AQ02F-0000074, the Permittee shall maintain records of the load, start-up and shutdown duration, and mass emissions (lb/event) during start-up and shutdown periods.
	1. In accordance with AQ02F-0000074, the Permittee shall maintain continuous records of SCR and oxidation catalyst inlet temperatures, combustion turbine inlet temperatures and ambient temperatures.
	2. In accordance with AQ02F-0000074, the Permittee shall maintain records of inspections of the SCR media that were conducted to evaluate and analyze the effectiveness of the media.
	3. In accordance with AQ02F-0000074, the Permittee shall maintain the SOMP for the NH <sub>3</sub> handling system serving EU1 in a convenient location and make it readily available to all employees.
	4. In accordance with AQ02F-0000074, the Permittee shall maintain on site records of inspection, maintenance, and testing results of the emission units and the date upon which it was performed in accordance with 310 CMR 7.04(4)(a).
1	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall maintain on site records of emissions testing conducted to demonstrate compliance with the applicable requirements in Table 3A in accordance with 310 CMR 7.13(1)(d).</li> </ol>
	<ul> <li>6. In accordance with AQ02F-0000074, the Permittee shall maintain records of the sulfur content of the natural gas for a period of five (5) years from the date of generation.</li> </ul>
	7. In accordance with AQ02F-0000074, the Permittee shall comply with all applicable recordkeeping requirements contained in 40 CFR Part 60, 40 CFR Part 72, 40 CFR Part 75, and 310 CMR 7.34. and 7.74.
	8. In accordance with 310 CMR 7.34(6) the Permittee shall keep onsite at the source all records required under 40 CFR 75 Subpart H, for a period of 5 years, from the date of each record unless otherwise indicated in 40 CFR 75 Subpart H.
	9. In accordance with 310 CMR 7.70(1), (2), (8) and Tr. No. X223662 the Permittee shall keep on site at the source all records required under 310 CMR 7.70(1), 310 CMR 7.70(2) and 310 CMR 7.70(8), or unless otherwise stated by MassDEP, for a period of 10 years. (State Only Requirement).
	<ul> <li>20. In accordance with 310 CMR 7.74(8) the Permittee shall keep on site at the source all records required under 310 CMR 7.74, for a period of 3 years, unless otherwise required by MassDEP. (State Only Requirement).</li> </ul>
	<ol> <li>In accordance with 40 CFR 72.9, 40 CFR Part 75, and the Acid Rain Permit effective 01/01/2009 [ORIS NO: 054805] the Permittee shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by EPA or MassDEP;</li> </ol>
	<ul><li>(1) Certificate of representation for the designated representative for the source and all supporting documents;</li><li>(2) All emissions monitoring information, to the extent that a 3-year retention period applies under 40</li></ul>
	<ul><li>CFR 75, the records shall be kept on site for a period of 3 years instead of 5 years;</li><li>(3) Copies of all reports, compliance certifications, and other submissions and all records made or required by the Acid Rain Program.</li></ul>
	<ul> <li>22. In accordance with 310 CMR 7.00 Appendix C.(10), the Permittee shall maintain analysis records of the circulating total dissolved solids for the circulating water.</li> </ul>
2	3. In accordance with 310 CMR 7.00 Appendix C.(10), the Permittee shall maintain a copy of the drift eliminator performance specification demonstrating compliance with 0.001% efficiency requirement.
	<ul> <li>4. In accordance with 310 CMR 7.00 Appendix C.(10), the Permittee shall maintain documentation (engineering calculations) demonstrating compliance with the ≤38,000 gpm circulating water flow rate.</li> </ul>

EU	Record Keeping Requirements	
	5. In accordance with AQ02F-0000074, the Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 3 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of a MassDEP approved record keeping form, in Microsoft Excel format, may be downloaded at: <a href="https://www.mass.gov/guides/massdep-facility-wide-emission-restrictions-caps-reporting#-application-&amp;-notification-forms">https://www.mass.gov/guides/massdep-facility-wide-emission-restrictions-caps-reporting#-application-&amp;-notification-forms</a> .	d
	<ul> <li>6. In accordance with AQ02F-0000074, the Permittee shall maintain records of monitoring and testing as required by Table 4.</li> <li>7. In accordance with AQ02F-0000074, the Permittee shall maintain a copy of this Plan Approval,</li> </ul>	
	underlying Application and the most up-to-date SOMP for the EU and PCD(s) approved herein on-site.	
Facility- wide	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall maintain a record of routine maintenance activities performed on the approved EU, PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.</li> </ol>	at
	9. In accordance with AQ02F-0000074, the Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s), PCD(s) and monitoring equipment. At a minimum, the records shall include date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.	
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration and 310 CMR 7.71 Greenhouse Gas Reporting.</li> </ol>	'n
	1. In accordance with 310 CMR 7.12(3)(c), Copies of Source Registration and other information supplied to the Department, to comply with 310 CMR 7.12 shall be retained by the facility owner/operator for five years from the date of submittal.	d
	2. In accordance with AQ02F-0000074, the Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.	.1
	3. In accordance with AQ02F-0000074, the Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.	
	4. In accordance with 310 CMR 7.71(5)(b) and (c), the Permittee shall keep on site at the facility documents of the methodology and data used to quantify emissions for a period of 5 years from the date the documen is created. The Permittee shall make these documents available to MassDEP upon request. (State Only Requirement).	
	<ol> <li>In accordance with 310 CMR 7.74(8) the Permittee shall keep on site at the source all records required under 310 CMR 7.74, for a period of 3 years, unless otherwise required by MassDEP. (State Only Requirement).</li> </ol>	

### Table 5 Key:

EU = Emission Unit	PCD = Pollution Control Device
AIG = Ammonia Injection Grid	CEMS = Continuous Emission Monitors
SCR = Selective Catalytic Reduction	SOMP = Standard Operating and Maintenance Procedure
PA = Protective Action	MECL = Minimum Emission Compliance Load
CO = Carbon Monoxide	M.G.L. = Massachusetts General Law
BAW = Bureau of Air and Waste	MassDEP = Massachusetts Department of Environmental Protection
CMR = Code of Massachusetts Regulations	CFR = Code of Federal Regulations
U.S.C. = United States Code	USEPA = United States Environmental Protection Agency
Lb = pounds	gpm = gallons per minute

	Table 6
EU	Reporting Requirements
	<ol> <li>In accordance with AQ02F-0000074 and 40 CFR 52.21(r)(6)(iv) and 310 CMR 7.00: Appendix A(2)(b), the Permittee shall submit a report to MassDEP within 60 days of the end of each calendar year for which records are generated documenting compliance with facility-wide emissions in Table 3A of this Plan Approval.</li> </ol>
	2. In accordance with AQ02F-0000074, the Permittee shall submit an annual report to MassDEP that summarizes the results of the annual inspection of the ammonia injection grid and SCR/CO catalyst.
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall comply with the reporting requirements of 310 CMR 7.34 and 40 CFR 75 Subpart H.</li> </ol>
1	<ul> <li>4. In accordance with AQ02F-0000074, the Permittee shall submit a written quarterly report via MassDEP's Compliance Reporting System <ul> <li>(https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/) under Continuous Emission Monitoring (CEM) System Excess Emissions Report (CEMRPT). The report will be submitted by the end of the following month and will contain at least the following information:</li> <li>a. CEMS periods of excess emissions</li> <li>i. For each period of excess emissions or excursions from allowable operating conditions, the Permittee shall list the duration, cause, the response taken, and the number of excess emissions (in pounds). Periods of excess emissions shall include periods of start, shutdowns, protective action, malfunction, emergency, equipment cleaning, and upsets or failures associated with emission control systems or CEMS.</li> <li>ii. "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown are not malfunctions.</li> <li>iii. "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the Permittee, including acts of God, which would require immediate corrective action to restore normal operation, and</li> </ul> </li> </ul>
	that causes the Project to exceed a technology-based limitation in this Plan Approval, due to unavoidable increases in emissions attributable to the emergency. An emergency does not include noncompliance caused by improperly designed equipment, lack of maintenance, careless or improper operations, operator error, or decision to keep operating despite knowledge of these things.)
	<ul> <li>b. A tabulation of periods of operation, including the time of the beginning and ending of starts, shutdowns, and protective actions.</li> <li>c. A tabulation of each extended start with the reason for the extension. Periods of start, extended start, or shutdown that meet the requirements of Table 3B are not considered deviations from allowable operating conditions.</li> </ul>
	5. In accordance with AQ02F-0000074, the Permittee shall provide the name, location, e-mail address (if any), telephone number and facsimile transmission number (if any) of the designated representative (DR) to the town of Milford, to the MassDEP and to any other person who so requests it. The Permittee shall keep the DR contact information current at all times.
	6. In accordance with 310 CMR 7.34(4) the Permittee shall electronically submit to the appropriate MassDEP Regional Office and EPA any notification of testing or any testing protocol no later than 21 days prior to the first scheduled day of testing.
	<ol> <li>In accordance with 310 CMR 7.34(4)(b) the Permittee shall electronically submit and certify a Quarterly NO<sub>X</sub> report to EPA within 30 days following the end of the calendar quarter that falls during the ozone season (May 1st – September 30th).</li> </ol>
	8. In accordance with 310 CMR 7.70(8)(d) the Permittee shall submit to the appropriate MassDEP Regional Office and EPA any notification of testing or any testing protocol in compliance with the requirements of 40 CFR 75.61. (State Only Requirement).

### Table 6

EU	Reporting Requirements
	<ol> <li>In accordance with 310 CMR 7.70(8)(e)3. and Tr. No. X223662 the Permittee shall submit a Monitoring System certification to the appropriate MassDEP Regional Office within 45 days after completing all CO2 monitoring system initial certification or recertification tests required under 310 CMR 7.70(8)(b). (State Only Requirement).</li> </ol>
	<ol> <li>In accordance with 310 CMR 7.70(4)(a)1. and Tr. No. X223662 the Permittee shall submit a Triennial Compliance Certification Report for each control period electronically in the RGGI CO2 Allowance Tracking System (COATS) to MassDEP by March 1st of the calendar year following the control period. (State Only Requirement).</li> </ol>
	11. In accordance with 310 CMR 7.70(8)(h)6.c and Tr. No. X223662 the Permittee shall submit an Annual Net Output Report for each calendar year electronically to MassDEP's agent in a format prescribed by MassDEP by March 1st of the preceding calendar year. (State only Requirement).
	<ol> <li>In accordance with 310 CMR 7.70(8)(e)4.b and Tr. No. X223662 the Permittee shall submit a Quarterly CO2 Emissions Report electronically to EPA within 30 days following the end of the calendar quarter covered by the report. (State Only Requirement).</li> </ol>
	13. In accordance with 310 CMR 7.74(7)(b) the Permittee shall submit to MassDEP by March 1st, 2019, and each March 1st thereafter, a Compliance Certification Report. (State Only Requirement).
	14. In accordance with 40 CFR Part 60.7(c), the Permittee shall submit reports of excess emissions and monitor downtime. Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
1	15. In accordance with 40 CFR Part 60.4340(a), the Permittee shall submit a written report via MassDEP's online reporting system of the results of each performance test before close of business on the 60 <sup>th</sup> day following completion of the performance test.
	16. In accordance with 40 CFR 72.9, 40 CFR Part 75, and the Acid Rain Permit effective 01/01/2009 [ORIS NO: 054805] the Permittee shall submit to the appropriate MassDEP Regional Office and EPA any notification of testing or any testing protocol.
	<ol> <li>In accordance with 40 CFR 72.9, 40 CFR Part 75, and the Acid Rain Permit effective 01/01/2009 [ORIS NO: 054805] the Permittee shall submit a Quarterly SO2 report to EPA within 30 days following the end of each calendar quarter.</li> </ol>
	<ol> <li>In accordance with 40 CFR 72.9, 40 CFR Part 75, and the Acid Rain Permit effective 01/01/2009 [ORIS NO: 054805] the Permittee shall submit a Quarterly NOx report to EPA within 30 days following the end of each calendar quarter.</li> </ol>
	19. In accordance with 40 CFR Part 77 and the Acid Rain Permit effective 01/01/2009 [ORIS NO: 054805] the Permittee shall submit a proposed offset plan in any calendar year where EU1has/have excess emissions. In addition, the Permittee shall pay any penalties specified in 40 CFR Part 77 and comply with the terms of an approved offset plan.
	20. In accordance with 310 CMR 7.34(4) and 40 CFR 75.73, the Permittee shall electronically submit to the appropriate MassDEP Regional Office and EPA any notification of testing or any testing protocol no later than 21 days prior to the first scheduled day of testing.
	21. In accordance with 310 CMR 7.34(4)(b) and 40 CFR 75.73(f), the Permittee shall electronically submit and certify a Quarterly NO <sub>X</sub> report to EPA within 30 days following the end of the calendar quarter that falls during the ozone season (May $1^{st}$ – September 30 <sup>th</sup> ).
	<ol> <li>In accordance with AQ02F-0000074, the Permittee shall comply with all applicable reporting requirements of 310 CMR 7.70, 310 CMR 7.71 (Reporting of Greenhouse Gas Emissions), and 40 CFR 60, 72, 73, 75 and 98 (Mandatory Greenhouse Gas Emissions Reporting).</li> </ol>
Facility- wide	23. In accordance with AQ02F-0000074, the Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).

EU	Reporting Requirements
	24. In accordance with AQ02F-0000074, the Permittee shall notify the Central Regional Office of MassDEP, BAW Permit Chief by cellphone: 781-540-6177, email: Thomas.Hannah@mass.gov (or the current Permit Chief, as applicable) and CERO.Air@mass.gov, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 3 requirements. A written report shall be submitted via MassDEP's Compliance Reporting System (https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/) under Exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
Facility-	25. In accordance with AQ02F-0000074, the Permittee shall notify the Milford Board of Health as soon as reasonably practical of the emergency and shall send the Milford Board of Health a copy of any written notice made to the MassDEP regarding this emergency. The written notice must contain a description of the emergency, identification of the exceedance(s), duration of the exceedance(s), reason for the exceedance(s), any steps taken to mitigate emissions, an estimate of the quantity of emissions released because of the emergency, any corrective actions taken and action plan to prevent future exceedance(s).
wide	"Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the Permittee, including acts of God, which would require immediate corrective action to restore normal operation, and that causes the Project to exceed a technology-based limitation in this Plan Approval, due to unavoidable increases in emissions attributable to the emergency. An emergency does not include noncompliance caused by improperly designed equipment, lack of maintenance, careless or improper operations, operator error, or decision to keep operating despite knowledge of these things.
	26. In accordance with AQ02F-0000074, the Permittee shall comply with all applicable reporting requirements in 40 CFR 60, 72, 73, 75 and 77.
	27. In accordance with AQ02F-0000074, the Permittee shall report, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form to MassDEP using the electronic data system on an annual basis. In accordance with 310 CMR 7.12(3)(a), the Permittee shall report detailed emission estimates for all criteria and hazardous air pollutants emitted at the Facility.
	28. In accordance with AQ02F-0000074, the Permittee shall report annually to MassDEP, in accordance with 310 CMR 7.71, all required greenhouse gas emissions.
	29. In accordance with 310 CMR 7.71(4) and 7.12, the Permittee shall electronically submit and certify a greenhouse gas emissions report to MassDEP on an annual basis. (State Only Requirement).

#### Table 6 Key:

EU = Emission Unit	CEMS = Continuous Emission Monitors
SCR = Selective Catalytic Reduction	CO = Carbon Monoxide
SO2 = Sulfur Dioxide	CO2 = Carbon Dioxide
BAW = Bureau of Air and Waste	NOx = Nitrogen Oxides
M.G.L. = Massachusetts General Law	MassDEP = Massachusetts Department of Environmental Protection
CFR = Code of Federal Regulations	CMR = Code of Massachusetts Regulations
U.S.C. = United States Code	USEPA = United States Environmental Protection Agency

### C. <u>GENERAL APPLICABLE REQUIREMENTS</u>

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

### D. <u>REQUIREMENTS NOT CURRENTLY APPLICABLE</u>

The Permittee is currently not subject to the following requirements:

Regulation	Reason
310 CMR 7.16 Reduction of Single Occupant Commuter Vehicle Use	Employs fewer than 250 people.
40 CFR Part 64 – Compliance Assurance Monitoring	Facility utilizes a continuous compliance determination method (NO <sub>x</sub> /CO CEMS), as defined in 40 CFR 64.1, and is therefore exempt from 40 CFR 64.

CO = Carbon Monoxide

Table 7

#### Table 7 Key:

NO<sub>x</sub> = Nitrogen Oxides CEMS =Continuous Emissions Monitoring System

# 5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

EU	Special Terms and Conditions
	1. In accordance with AQ02F-0000074, emission limits in Table 3B only apply during the specified event type defined below while the emission limits in Table 3A apply at all other times.
1	<ul> <li>a. Startup – Startup is defined as an event that begins with the initiation of combustion and concludes with the achievement of lowest load at which the CTG can maintain compliance with the Table 3A emission limits (MECL). Startup shall not exceed 180-minutes duration except that a start period may be extended for no more than an additional 180 minutes (Extended Start) if the additional time is minimized in accordance with prudent operational and maintenance practices. Should a start be extended, the Permittee shall report the extension and the reasons for it in accordance with the reporting requirements in Table 6. Extended Startups are intended to prevent instances where the Facility is close to complying with steady state emission limits but doesn't get into compliance and is forced to shut down and restart the unit in order to avoid emissions violations.</li> </ul>
	<ul> <li>b. Shutdown – Shutdown is defined at the time from steady-state operation when operating on natural gas to "no flame". Shutdown shall not exceed 60-minute duration.</li> </ul>
	<ul> <li>c. Protective Action – A "Protective Action" is defined as an event causing a reduction in Gas Turbine load, whether automatically or manually initiated, used to prevent damage or harm to equipment or personnel. Protective Action events will not exceed 240 minutes.</li> </ul>
	2. In accordance with AQ02F-0000074, the Permittee shall develop and maintain a quality assurance/quality control ("QA/QC") program for the long-term operation of the CEMS which conforms to 40 CFR 60, Appendix F, and all applicable portions of 40 CFR 72 and 75. The MassDEP has previously approved the QA/QC program.

#### Table 8.

EU	Special Terms and Conditions		
	3. In accordance with AQ02F-0000074, the Permittee shall maintain on-site an adequate supply of spare parts for the CEMS to maintain the on-line availability and data capture requirements.		
	4. In accordance with AQ02F-0000074, the Permittee shall keep emission rates from the facility at the lowest practical level at all times but shall not exceed the emission limits specified in Tables 3A and 3B except as specified in Condition 1 of Table 8.		
	5. In accordance with AQ02F-0000074, periods of extended startup that meet the requirements of Table 8 Condition 1 are not considered permit deviations.		
	6. In accordance with AQ02F-0000074, the Permittee shall ensure that the multipollutant catalyst system is operational as soon as the flue gas temperature at the inlet to the system is above the minimum flue gas temperature specified by the equipment manufacturer and other system parameters are satisfied for the system's operation.		
	7. In accordance with AQ02F-0000074, the Permittee shall demonstrate continuous compliance with the VOC emission limits in Table 3A by direct mathematical relationship with appropriate CO emissions as determined for the Facility.		
	8. In accordance with AQ02F-0000074, the Permittee shall not operate the Duct Burner during Startup, Shutdown, or Protective Action conditions.		
	9. In accordance with AQ02F-0000074, the Permittee shall not operate the Duct Burner when the CTG is not operating.		
	10. In accordance with AQ02F-0000074, emissions during start-ups and shutdowns, protective actions and malfunctions shall be included in the annual limits specified in Table 3A.		
1	11. In accordance with AQ02F-0000074, the Permittee shall develop as part of the Standard Operating Procedures, a MECL optimization protocol to establish minimum operating load(s) that maintain compliance with all emission limitations at various ambient temperatures and conditions for each respective emission unit.		
	12. In accordance with AQ02F-0000074, the Permittee shall empty, clean, and inspect the ammonia tank, using appropriately trained personnel, at the interval recommended by the tank manufacturer.		
	13. In accordance with AQ02F-0000074 and 310 CMR7.04(4)(a), the duct burner shall be inspected and maintained in accordance with the manufacturers recommendations and tested for efficient operation at least once in each calendar year. The results of said inspection, maintenance, and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the facility.		
	14. In accordance with AQ02F-0000074, EU1 shall continue to emit through a single stack having the		
	following parameters:Stack No.1Stack Height125 feetStack Exit Diameter19.1 feetStack MaterialSteel		
	<ul> <li>15. In accordance with 40 CFR Part 73, Tables 2, 3, or 4 (as amended) and the Acid Rain Permit effective 01/01/2009 [ORIS NO: 054805] the Permittee's yearly allowance allocations are identified below:</li> </ul>		
	EU 2010 and beyond (annual SO <sub>2</sub> allocation)		
	EU1 0		
2	16. In accordance with AQ02F-0000074, the Permittee shall operate and maintain the cooling towers according to the manufacturer's specifications.		
Facility- wide	17. In accordance with AQ02F-0000074, the Permittee shall not be automatically shielded from enforcement action brought for noncompliance with emission limitations specified in this Plan Approval because of an "emergency".		
	18. In accordance with AQ02F-0000074, in any enforcement proceedings, the Permittee has the burden of proof in establishing the occurrence of an emergency.		

EU	Special Terms and Conditions	
Facility- wide	19. In accordance with AQ02F-0000074, the Permittee shall not be shielded from enforcement for any emission exceedance that would result in a predicted exceedance of any health-based air quality standards.	
	20. In accordance with AQ02F-0000074, the Permittee shall properly train all personnel to operate the Facility and pollution control devices in accordance with vendor specifications. All persons responsible for the operation of the ammonia handling and SCR control systems shall sign a statement affirming that they have read and understand the approved standard operating and standard maintenance procedures. The Permittee shall conduct refresher training at least once annually.	
	21. In accordance with AQ02F-0000074, the Permittee shall maintain, in the Facility control room, portable ammonia detectors for use during a spill or atmospheric release. The Permittee shall calibrate the portable ammonia monitors at least once per year or at the frequency recommended by the ammonia detector manufacturer.	
	22. In accordance with AQ02F-0000074, the Permittee shall periodically maintain, test, and calibrate the ammonia tank level alarm system as recommended by the manufacturer and maintain the calibration records on site.	
	23. In accordance with AQ02F-0000074, the Permittee shall store the standard operating and maintenance procedures for the ammonia handling system in a convenient location (such as the control room and/or the technical library) and make them readily available to all employees.	
	24. In accordance with AQ02F-0000074, the Permittee shall pave and maintain Facility site access roadways and onsite traffic areas to prevent dust emissions at all times.	

#### Table 8 Key:

EU = Emission Unit	CTG = Combustion Turbine Generator		
DB = Duct Burner	SCR = Selective Catalytic Reduction		
HHV = High Heating Value	% = Percent		
CO = Carbon Monoxide	$NH_3 = Ammonia$		
$SO_2 = Sulfur Dioxide$	$H_2SO_4 = Sulfuric Acid$		
MECL = Minimum Emission Compliance Load	MassDEP = Massachusetts Department of Environmental Protection		
Tr = Transmittal Number			

### 6. <u>ALTERNATIVE OPERATING SCENARIOS</u>

The Permittee did not request alternative operating scenarios in its Operating Permit application.

### 7. <u>EMISSIONS TRADING</u>

#### A. INTRA-FACILITY EMISSION TRADING

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

### B. INTER-FACILITY EMISSION TRADING

All increases in emissions due to emission trading, must be authorized under the applicable requirements of 310 CMR 7.00: Appendix B (the "Emissions Trading Program") and the 42 U.S.C. §7401 et seq. (the "Act"), and provided for in this Permit.

### 8. <u>COMPLIANCE SCHEDULE</u>

The Permittee has indicated that the Facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

# GENERAL CONDITIONS FOR OPERATING PERMIT

# 9. <u>FEES</u>

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

# **10.<u>COMPLIANCE CERTIFICATION</u>**

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the MassDEP's web site, <u>https://www.mass.gov/guides/massdep-operating-permit-compliance-program#-operating-permit-reporting-kit-</u>.

### A. Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Operating Permit. The report shall be submitted by January 30 to the MassDEP via MassDEP's Compliance Reporting System (<u>https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/</u>) under Operating Permit Annual Certification (OPANN) and to U.S. Environmental Protection Agency - Region 1 through EPA's Compliance and Emissions Data Reporting Interface (<u>https://cdx.epa.gov/</u>). The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4) any additional information required by the MassDEP to determine the compliance status of the source.

#### B. Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the Facility is in compliance with the requirements of this Permit. The report shall be submitted via MassDEP's Compliance Reporting System (*https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/*) under Operating Permit Semi-Annual Emissions Summary (OPSEMI) by January 30 and July 30 to MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- 4) whether there were any deviations during the reporting period;
- 5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- 6) whether deviations in the reporting period were previously reported;
- 7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- 8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and,
- 9) any additional information required by the MassDEP to determine the compliance status of the source.

### 11.<u>NONCOMPLIANCE</u>

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal,

State, or Local rules and regulations, not addressed in this Permit.

### 12.PERMIT SHIELD

A. This Facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier approval or Permit, the terms and conditions of this Permit control.

- B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Table 7.
- C. Nothing in this Permit shall alter or affect the following:
  - 1) the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
  - 2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
  - 3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

### 13.<u>ENFORCEMENT</u>

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.18(1)(b), 7.70, 7.71, 7.72, 7.73, 7.74, 7.75, 7.76 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A.

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

### 14.<u>PERMIT TERM</u>

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

## 15.PERMIT RENEWAL

Upon the MassDEP's receipt of a complete and timely application for renewal, this Facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

# 16.<u>REOPENING FOR CAUSE</u>

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the Facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

# **17.<u>DUTY TO PROVIDE INFORMATION</u>**

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

# **18.<u>DUTY TO SUPPLEMENT</u>**

The Permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the Facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

# **19. TRANSFER OF OWNERSHIP OR OPERATION**

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

## 20. PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

# 21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- A. Enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

# 22. PERMIT AVAILABILITY

The Permittee shall have available at the Facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

### 23.SEVERABILITY CLAUSE

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

# 24.<u>RESERVED</u>

### 25.<u>PERMIT DEVIATION</u>

Deviations are instances where any permit condition is violated. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Air and Waste the following deviations

from permit requirements, by telephone, or by electronic mail (e-mail), within three (3) days of discovery of such deviation:

- A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- B. Exceedances of parameter limits established by this Operating Permit or other approvals, where the parameter limit is identified by the Permit or approval as surrogate for an emission limit.
- C. Exceedances of Permit operational limitations directly correlated to excess emissions.
- D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, this Operating Permit, or other approvals.
- E. Failure to perform QA/QC measures as required by this Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Air and Waste Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, <u>https://www.mass.gov/guides/massdep-operating-permit-compliance-program#-operating-permit-reporting-kit-</u>. This report shall include the deviation, including those attributable to upset conditions as defined in the

This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via MassDEP's Compliance Reporting System (*https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/*) under Operating Permit Deviation Report (OPDR) to the regional Bureau of Air and Waste within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

# 26.<u>OPERATIONAL FLEXIBILITY</u>

The Permittee is allowed to make changes at the Facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen (15) days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the Facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

## 27. MODIFICATIONS

- A. Administrative Amendments The Permittee may make changes at the Facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- B. Minor Modifications The Permittee may make changes at the Facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).
- C. Significant Modifications The Permittee may make changes at the Facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

### 28. OZONE DEPLETING SUBSTANCES

This section contains air pollution control requirements that are applicable to this Facility, and the United States Environmental Protection Agency enforces these requirements.

- A. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - 1) All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
  - 2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
  - 3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
  - 4) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR 82.112.
- B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices of 40 CFR 82.156.
- 2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- 4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
- 5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.
- 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- C. If the Permittee manufactures, transforms, imports, or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part82, Subpart A, "Production and Consumption Controls".
- D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.
- E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

# 29.GAS INSULATED SWITCHGEAR

Pursuant to 310 CMR 7.72(2) Definitions:

"Gas Insulated Switchgear or GIS" means all electrical power system equipment insulated with  $SF_6$  gas. Gasinsulated switchgear or GIS includes switches, stand-alone gas-insulated equipment, and any combination of electrical disconnects, fuses, electrical transmission lines, transformers and/or circuit breakers used to isolate gas-insulated electrical power system equipment.

The Permittee shall comply with the following requirements under 310 CMR 7.72 for any GIS purchased after January 1<sup>st</sup>, 2015:

- Ensure that the GIS has a maximum annual SF6 leak rate of 1%, as represented by the manufacturer.
- Maintain the GIS in accordance with maintenance procedures or industry best management practices that have the effect of reducing leakage of SF6 (310 CMR 7.72(4)(b)).

- If, beginning with the second time that a GIS owner adds SF6 to a GIS unit, or group of commonly-owned, leased, operated, or controlled GIS, the GIS owner becomes aware that the annual average leakage rate for the new GIS equipment is greater than 1%, the GIS owner must inform MassDEP and describe actions that are expected to reduce the emission rate in the future (310 CMR 7.72(4)(c)).
- Record, no less than annually, the amount of SF6 added to each piece of active GIS equipment (310 CMR 7.72(8)(b)).

The Permittee shall comply with the following requirements under 310 CMR 7.72 for any GIS regardless of purchase date:

• Upon removal of any GIS containing SF6 from the ownership, lease, operation, or control of a GIS owner, the GIS owner must provide for the secure storage, re-use, recycling, or destruction of the SF6 (310 CMR 7.72(4)(d)).

#### This is a state only requirement.

# **APPEAL CONDITIONS FOR OPERATING PERMIT**

This Permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the Facility must continue to comply with all existing federal and state applicable requirements to which the Facility is currently subject, until a final decision is issued in the case, or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the Facility shall not be in violation of the Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts Department of Environmental Protection P.O. Box 4062 Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the

Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.