

# Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protectic

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# AIR QUALITY 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"]:**

Hudson Light and Power Department 49 Forest Avenue Hudson, MA 01749

#### **FACILITY LOCATION:**

Hudson Light and Power Department 77 Cherry Street Hudson, MA 01749

#### **NATURE OF BUSINESS:**

**Electrical Power Generation** 

#### **RESPONSIBLE OFFICIAL:**

Name: Xiaofeng Yan Title: Operations Manager

#### INFORMATION RELIED UPON:

Approval No. 79294 (Emission Control Plan) Transmittal No. X229534 (OP Renewal 2010) Transmittal No. X263179 (OP Renewal application)

#### **FACILITY IDENTIFYING NUMBERS:**

AQ ID: 119-0904 FMF FAC NO.: 130613 FMF RO NO.: 51678

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

(NAICS): 221112

#### **FACILITY CONTACT PERSON:**

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### This Operating Permit shall expire on September 5, 2024.

For the Department of Environmental Protection, Bureau of Air and Waste

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.	September 5, 2019
Douglas E. Fine, Deputy Regional Director	Date

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### SPECIAL CONDITIONS FOR OPERATING PERMIT

# 1. PERMITTED ACTIVITIES

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 emission units ("Emission 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 Operating 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 Operating Permit.

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

Hudson Light and Power Department ("Permittee"), located at 77 Cherry St, Hudson, Massachusetts, is a municipally owned and operated backup electrical generation station ("Facility") with a Standard Industrial Code of 4911 and North American Industry Classification System Code 221112. The Facility provides necessary backup function for the ISO New England grid, using settlement-only generation (receives capacity credit, is not centrally dispatched by the ISO control room, and is not monitored in real time) without black start capability. The Facility has the potential to emit 50 or more tons per year of oxides of nitrogen ("NOx"), thereby classifying it as a "major" facility subject to the Operating Permit program, at 310 CMR 7.00, Appendix C.

The Permittee provided calculations to demonstrate that it is not a major source of hazardous air pollutants ("HAPs"), having a potential to emit only 1.1 tons per year of HAPs, and on August 30, 2010 submitted an Initial Notification of Applicability as an area source (non-major) subject to National Emissions Standards for Hazardous Air Pollutants ("NESHAP") for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subpart ZZZZ.

The Permittee operates five existing, nonemergency, compression-ignited ("CI") lean-burn, stationary, reciprocating internal combustion engines/generators (RICE) above 500 brake horsepower ("bhp"). The engines are noted as emission units ("EUs") 7, 8, 10, 11 and 12 in this Operating Permit. EUs 8, 10, and 12 are dual-fuel (natural gas and #2 Fuel Oil); EUs 7 and 11 combust #2 Fuel Oil only. The use of natural gas was phased out by 2014 at EU11, a previously dual fuel engine. EU 12 is 4-stroke engine; EUs 7, 8, 10, and 11 are 2-stroke engines. Three engines, EU7, EU8 and EU12, are located inside the main building and two engines, EU10 and EU11, are located in trailers outside.

Their stack parameters are as follows:

EU	Stack Height Above Ground (Feet)	Inside Exit Diameter (Inches)
7	49	32
8	49	34
10	22	20
11	22	20
12	51	32

All five engines are fitted with open crankcase filtration emission controls systems which reduce the emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals in compliance with 40 CFR 63.6625(g)(1). In addition, all five operable engines at the site were fitted in June 2013 with Miratech catalytic oxidizers, silencers, and sensors for pressure and temperature. The catalysts are designed to reduce Carbon Monoxide ("CO") by70 percent ("%") or more or achieve a standard of 23 parts per million by volume, dry basis ("ppmvd") CO corrected to 15 percent Oxygen (15% O2) as prescribed by the rule. They were stack tested on June 10, 2013, and again on August 27, 2018 for the EUs that were operable at that time, and on April 26, 2019 for EU12), and were determined to be in compliance with the emission limits in 40 CFR Part 63 Subpart ZZZZ, Table 2d. Data Test opacity monitors were installed in 2000 on EUs 7, 8, and 12.

A previously permitted engine, EU9, was decommissioned on September 17, 2002 as stated in the source registration submittal. Should the Permittee intend to operate said decommissioned engine, the Permittee shall comply with applicable permitting requirements, as contained in 310 CMR 7.02, to obtain a Plan Approval from MassDEP prior to operation. EU9 is not addressed further in this Operating Permit.

Lastly, the Facility has a parts cleaner noted as EU13 in this Operating Permit. The Permittee recently decommissioned a former incidental emission unit, a 0.26 million British thermal units per hour ("MMBtu/hr") Lanair oil-fired space heater.

The five existing RICE at the Facility shall comply with the emission limits, monitoring, testing, installation, operation/maintenance, record-keeping, and reporting requirements listed in 40 CFR Part 63, Subpart ZZZZ for existing, limited use, non-emergency, non-black start, compression-ignition, greater than 500 horsepower ("HP") engines located at an area source for HAP. MassDEP concurs that the engines currently meet the definition of Limited Use designation based on the run data received for the Permittee. The five engines must achieve 70% destruction of CO as required by 40 CFR 63.6603(a) Table 2d. In 2013, the Permittee requested, received, and complied with an extension request for these requirements due to a backlog of orders with vendors. After installing the oxidation catalysts, the Permittee performed compliance testing and met this requirement.

The Permittee is not subject to the compliance assurance monitoring ("CAM") requirements of 40 CFR 64. Initially, the Permittee was exempt in the original Operating Permit because the engines did not have any emission control equipment. The Permittee installed Miratech oxidation catalysts on all five engines in June 2013. However, the Permittee is still not subject to CAM requirements under the exemption at 40 CFR 64.2(b)(1)(i) as the emission limitations the Permittee is currently meeting was proposed by EPA after November 15, 1990 pursuant to section 111 or 112 of the Clean Air Act.

### 310 CMR 7.19, NOx Reasonably Available Control Technology ("NOx RACT")

As the Facility has the potential to emit 50 or more tons per year of oxides of nitrogen ("NOx"), it is subject to the NOx RACT at 310 CMR 7.19. Specifically, the five engines are subject to 310 CMR 7.19(8) which requires the submission of a NOx RACT Emissions Control Plan ("ECP") and have it approved by MassDEP.

On September 27, 1994, MassDEP issued NOx RACT ECP Approval Transmittal Number ("Tr")79294. The 1994 ECP stated that MassDEP considered all engines subject to 310 CMR 7.19(8). Because some of the engines had not demonstrated compliance with the timing retard requirements, the ECP required subsequent testing and approvals. Supplemental information was submitted in September 1995 which clarified the regulatory requirements for each engine. The 1994 ECP was not modified per se, but

MassDEP accepted the updated information on the test results which showed compliance with the regulations. An ECP application was not required under the regulations promulgated on March 9, 2018 as all of the engines meet the emission requirements of 310 CMR 7.19 (8) as long as Engine 8 does not operate in the winter months. For more detail, see Engine 8 description below.

**Engine 7**: Timing retard is not achievable due to unsuitable combustion conditions and the production of visible emissions. No timing retard has been established for Engine 7 due to these temperature and opacity complications. As the 4 degrees of timing retard cannot be achieved on this engine, the NOx emission standard of 9 grams per brake horse power hour ("g/bhp-hr") is used. This engine has demonstrated compliance with that standard by a stack test on May 19, 1994. This engine is in compliance with 310 CMR 7.19(8)(c) as long as it operates less than 1000 hours during any consecutive 12- month period.

**Engine 8**: Timing retard is not achievable due to unsuitable combustion conditions and the production of visible emissions. No timing retard has been established for Engine 8 due to temperature and opacity complications. As the 4 degrees of timing retard cannot be achieved on this engine, the NOx emission standard of 9 g/bhp-hr is used. Test results in 1994 indicated that the unit produces less than ("<") 11 g/bhp-hr when firing oil and < 6 g/bhp-hr under dual fuel operation. As safe operation of EU8 requires startup and shutdown on oil only, the engine is considered to operate either as dual fuel or oil only, and emission limits for gas only do not apply. Subsequent testing in January 2019, witnessed by MassDEP, indicated that the unit remains unable to meet 9 g/bhp-hr on oil alone.

The Permittee previously complied with a now retired regulation, 310 CMR7.19(2)(f), known as 'seasonal fuel switching'. As of March 9, 2018, the Permittee must comply with the 9 g/bhp-hr year round on an hourly basis, as required by 310 CMR 7.19(8)(c)3. Fuel switching reports submitted semiannually under the retired regulation indicate that the Permittee can meet this limit by operating year round in its former summer mode, with dual fuel as the primary mode during each hour of operation. As the Permittee is unable to meet applicable emission limits when burning oil alone but had a contract which prohibited gas usage during certain winter months, the Permittee was not allowed to operate EU8 during those months after the March 9, 2018 regulation change. The Permittee subsequently secured year-round gas service effective September 1, 2019 and therefore will be allowed to operate EU8 year round (on gas).

**Engines 10 and 11**: A 4 degree ignition timing retard relative to standard timing has been set and maintained for each of these engines. These engines are in compliance with 310 CMR 7.19(8)(e) as long as they operate less than 1000 hours during any consecutive 12- month period.

**Engine 12**: No timing retard had been established for Engine 12 at the time the ECP was issued. However, on November 8, 1994, the engine's timing was successfully retarded by 4 degrees without exceeding the exhaust temperature limits and the opacity limits. This engine is in compliance with 310 CMR 7.19(8)(e) as long as it operates less than 1000 hours during any consecutive 12- month period.

If any EU operates 1000 hours or more within a consecutive12-month period after March 8, 2018 then these units must meet 2.3 grams per brake horsepower-hour within two years.

Additionally, EUs 7, 8, and 12, which have capacities exceeding 30 MMBtu/hr, if they operate 1000 hours or greater in a consecutive12-month period, they must install and use Continuous Emission Monitors ("CEM") to demonstrate compliance.

#### 310 CMR 7.05(1)(a)(1)

The fuel sulfur requirements of 310 CMR 7.05(1)(a)(1) and Table 1 as well as 40 CFR 63.6604(a) apply

to the Permittee.

### 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).

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, 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"), and perfluorocarbons ("PFCs").

The Facility has no gas-insulated switchgear, so is not subject to 310 CMR 7.72.

Table 1 lists the emission units subject to this Operating Permit. Table 2 describes the exempt activities that are not mentioned further in the Operating Permit. Tables 3, 4, 5, 6, and 8 describe the applicable requirements that the EUs are subject to in the Operating Permit. Table 7 lists the requirements that the Permittee is currently not subject to, including Compliance Assurance Monitoring ("CAM").

### 2. EMISSION UNIT IDENTIFICATION

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

	Table 1				
EU	Description of EU	Design Capacity	PCD		
7	Engine 7 Nordberg Model No. TS 2110, diesel aspirated, 10 cylinders, installed 1951	31 MMBtu/hr input, 3000 kW output	Oxidation Catalyst, Exhaust Silencer		
8	Engine 8 Nordberg Model No. TSGL-2110-31 dual fuel aspirated, 10 cylinders, installed 1956;	37 MMBtu/hr input, 3600 kW output	Oxidation Catalyst, Exhaust Silencer		
10	Engine 10 Fairbanks Morse Model No. 38TDD8 1/8 dual fuel turbocharged, 12 cylinders, installed 1962	23 MMBtu/hr input, 2200 kW output	Oxidation Catalyst, Exhaust Silencer		
11	Engine 11 Fairbanks Morse Model No. 38TDD8 1/8 diesel turbocharged, 12 cylinders, installed 1962	23 MMBtu/hr input, 2200 kW output	Oxidation Catalyst, Exhaust Silencer		
12	Engine 12 Cooper Bessemer Model No. LSV20GDT dual fuel turbocharged, 20 cylinders, installed 1972	52 MMBtu/hr input, 5600 kW output	Oxidation Catalyst, Exhaust Silencer		
13	Parts cleaner	5 gallons	None		

#### Table 1 Key

EU = Emission Unit PCD = Pollution Control Device  $MMBtu/hr = million \ British \ thermal \ units \ per \ hour$ 

kW = kilowatts

# 3. <u>IDENTIFICATION OF EXEMPT ACTIVITIES</u>

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 C(5)(h)	7.00:Appendix

# 4. APPLICABLE REQUIREMENTS

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

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

	Table 3				
EU	Fuel/Raw Material	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No
7	Fuel oil	NOx	< 1000 hours during any consecutive 12 month period. 1, 2	9.0 g/bhp-hr <sup>3,</sup>	310 CMR 7.19(8)(c) 3; ECP Approval Tr79294
8	Natural Gas, Fuel Oil <sup>4</sup>	NOx	< 1000 hours during any consecutive 12 month period. <sup>1, 2</sup>	9.0 g/bhp-hr <sup>3,</sup>	310 CMR 7.19(8)(c) 3; ECP Approval Tr79294
10, 11, 12	Natural Gas, Fuel Oil	NOx	< 1000 hours during any consecutive 12 month period. <sup>1, 2</sup>	Set and maintain the ignition timing of the engine 4 degrees retarded relative to standard timing 4	310 CMR 7.19(8)(e); ECP Approval Tr79294
7, 8, 10, 11, 12	Natural Gas, Fuel Oil	NOx	≥ 1000 hours during any consecutive 12 month period <sup>1, 2</sup>	2.3 g/bhp-hr within 2 years <sup>3</sup>	310 CMR 7.19(8)(d)3

	Table 3				
EU	Fuel/Raw Material	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No
7, 8, 10, 11, 12	Natural Gas, Fuel Oil	Opacity		Not to exceed 20% for a period or aggregate period in excess of 2 minutes during any one hour provided that at no time during the said 2 minutes shall opacity exceed 40%.	310 CMR 7.06(1)(b)
7, 8, 10, 11, 12	Natural Gas, Fuel Oil	Smoke		Not to exceed #1 of the Chart <sup>7</sup>	310 CMR 7.06(1)(a) and 310 CMR 7.04(2) for EU12 only
7, 8, 10, 11, 12	Fuel Oil	$SO_2$		Sulfur content in fuel not to exceed 15 ppm by weight	310 CMR 7.05(1)(a)1; 40 CFR 63.6604(a)
7, 8, 10, 11, 12	Natural Gas, Fuel Oil	СО		Except during startups: 23 ppmvd at 15% O <sub>2</sub> or 70% reduction	40 CFR 63.6603(a) Table 2d, #3
13	Cleaning solvents	VOC	Solvent use < 100 gallons/month	Solvent vapor pressure ≤ 1 mmHg (20°C)	310 CMR 7.03(8) and 310 CMR 7.18(8)(a)
Facility- wide	All	GHG <sup>8</sup>	NA	NA	310 CMR 7.71 (State Only Requirement)

### Table 3 Key:

°C =degrees Celsius ppm = parts per million

CO = Carbon Monoxide ppmvd = part per million dry weight by volume

EU = Emission Unit  $SO_2 = Sulfur Dioxide$ 

g/bhp-hr = grams per brake horse power hour VOC = volatile organic compounds

GHG = greenhouse gases @  $15\% O_2$  = corrected to 15 percent oxygen

mmHg = millimeters of mercury  $\geq = greater$  than or equal to

 $NO_x = Nitrogen Oxides$  <= less than

 $O_2 = Oxygen$   $\leq$  = less than or equal to

% = percent

#### **Table 3 Notes:**

- 1. Add the current calendar month amount to the previous 11 calendar months' total amount.
- 2. Since March 9, 2018.

- 3. For all EUs, compliance with emission limit(s)/standard(s) shall be based on a one-hour averaging time unless a monitoring system allowed under 310 CMR 7.19(8)(c)4 or (d)(4) is used, in which case, compliance will be determined on a calendar day average.
- 4. With dual fuel mode, fuel oil shall only be used only for ignition and shutdown, with natural gas as the primary fuel.
- 5. See Table 4, Condition 1.
- 6. EUs 7, 8, and 12 are equipped with opacity monitors. EU 12 is required to have a smoke density monitor pursuant to 310 CMR 7.04(2) due to its input capacity is greater than 40 MMBtu/hr.
- 7. For a period or aggregate period of time in excess of 6 minutes during any one hour provided that at no time during the said 6 minutes shall the shade, density or appearance be greater than #2 of the Chart.
- 8. Greenhouse Gas means any chemical or physical substance emitted into the air 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"), and perfluorocarbons ("PFCs").

#### B. COMPLIANCE DEMONSTRATION

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 Table 3:

Table 4			
EU	Monitoring And Testing Requirements		
12	. In accordance with 310 CMR 7.04(2)(a), the Permittee shall install and maintain a properly operating opacity monitor and recorder that has an audible alarm to signal the need for equipment adjustment when the smoke density is equal to or greater than No. 1 of the Chart.		
10,11	2. In accordance with 310 CMR 7.19(13)(a)(9), if any engine < 30 MMBtu/hr operates 1000 hours or more in any consecutive 12-month period, the Permittee shall demonstrate compliance with the NOx Limit listed in Table 3 of this Operating Permit by performing a compliance stack test as specified in 310 CMR 7.19(13)(c).		
7, 8, 12	In accordance with 310 CMR 7.19(13)(a)(8), if any engine ≥ 30 MMBtu/hr operates 1000 hours or more in any consecutive 12 month period, the Permittee shall demonstrate compliance with the NOx limit listed in Table 3 with a properly operating continuous emission monitoring system ("CEMS") as specified in 310 CMR 7.19(13)(b).		
10, 11, 12	<ul> <li>4. In accordance with Emission Control Plan 79294 and 310 CMR 7.19(8)(e), the Permittee shall inspect and adjust the ignition timing of each engine at least once every 3 years to verify the ignition timing of each engine is maintained 4 degrees retarded relative to standard timing; provided the ignition timing shall not be retarded beyond the point that:</li> <li>a) CO emissions concentration increases by 100 ppmvd @ 15% O2, or</li> <li>b) the turbocharger speed is increased beyond the maximum operating speed recommended by the manufacturer, or</li> <li>c) the exhaust port temperature increases beyond the manufacturer's recommended maximum operating temperature.</li> </ul>		
7, 8, 10, 11,	5. In accordance with 310 CMR 7.19(8)(e) 2, the Permittee shall install and maintain an elapsed time meter on each engine to indicate, in cumulative hours, the elapsed engine operating hours for the previous 12 month period on a monthly basis.		

	Table 4
EU	Monitoring And Testing Requirements
	6. In accordance with 310 CMR 7.19(13)(d) 3., the Permittee shall measure for each engine on a daily basis the type fuel(s) burned each day, heat content of each fuel, the total heating value of the fuel consumed for each day, and the allowable emission rate.
	7. In accordance with 310 CMR 7.05(1)(a), 40 CFR 63.6604(a), and 40 CFR 80.510(b), the Permittee shall monitor the sulfur content of each new shipment of Fuel Oil received. Compliance with sulfur content requirement of 15 ppmvd can be demonstrated through testing or maintaining a shipping receipt from the fuel supplier. The shipment certification or testing of sulfur content of Fuel Oil shall be in accordance with the applicable American Society for Testing Materials ("ASTM") test methods or any other method approved by MassDEP and EPA.
	8. In accordance with Emission Control Plan 79294, 310 CMR 7.13, and 310 CMR 7.19(13)(c), the Permittee shall, upon request from MassDEP, perform Emissions Compliance Testing (Stack Testing) on any engine to demonstrate compliance with NOx emission limits in Table 3. Stack testing shall be conducted in accordance with, 40 CFR Part 60, Appendix A. Prior to Stack Testing, the Permittee shall install appropriate testing ports to accommodate the requirements in 40 CFR Part 60, Appendix A (Method 1).
	9. In accordance with 40 CFR 63.6615 and Table 3 of 40 CFR 63Subpart ZZZZ, if any of the engines operates <i>less than</i> 100 hours per year (i.e. limited use engine), the Permittee shall conduct CO emission testing on that engine every 8,760 hours of operation or every 5 years, whichever comes first. If any of the engines operates <i>more than</i> 100 hours per year (i.e. not a limited use engine), the Permittee shall conduct CO emission testing on that engine every 8,760 hours of operation or every 3 years, whichever comes first. In accordance with 40 CFR 63.6620, the Permittee shall conduct the emission testing as specified in Table 4, Item 1 of 40 CFR 63 Subpart ZZZZ. The initial CO emission testing was conducted in June 10-14, 2013.
7, 8, 10, 11, 12	<ul> <li>10. In accordance with 40 CFR 63.6640(a), and Table 6, Condition 10 (not limited use engines) or Condition 12 (existing limited use engines) of 40 CFR 63 Subpart ZZZZ, the Permittee shall:</li> <li>a) Collect the catalyst inlet temperature data according to §63.6625(b); and</li> <li>b) Reduce these data to 4-hour rolling averages; and</li> <li>c) Maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</li> <li>d) Measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the performance test.</li> </ul>
	<ul> <li>11. Pursuant to 40 CFR 63.6640(a) and Table 2b Item 2 of 40 CFR 63 Subpart ZZZZ, the Permittee shall monitor the pressure drop across the catalyst and the temperature of the engine exhaust so that it complies with each operating limitation:</li> <li>a) maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the June 2013 performance test (monitor monthly); and</li> <li>b) maintain the temperature of the RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F (monitor every 15 minutes, use 4-hour rolling averages to determine compliance)</li> </ul>

Table 4				
EU	Monitoring And Testing Requirements			
7, 8, 10, 11, 12	12. Opacity shall be determined in accordance with EPA Test Method 9 where opacity monitors are not available and operating, as specified in 40 CFR Part 60, Appendix A in accordance with 310 CMR 7.00 Appendix C (9)(b).			
13	13. In accordance with 310 CMR 7.18(8) (g), the Permittee shall monitor the following the identity, quantity, formulation and density of the solvent used and quantity, formulation and density of all waste solvent generated.			
	14. In accordance with 310 CMR 7.18(8) (h), the Permittee shall test the emission unit to demonstrate compliance with 310 CMR 7.18(8) upon request by MassDEP.			
Facility- wide	15. In accordance with 310 CMR 7.00: Appendix C(9), the Permittee shall monitor the operations of the entire facility such that necessary information is available for the preparation of the annual Source Registration/Emission Statement Forms as required by 310 CMR 7.12.			
	16. 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, SF <sub>6</sub> 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)			

### Table 4 Key:

 $\begin{aligned} & \text{CO = Carbon Monoxide} & \text{RICE = Reciprocating Internal Combustion Engines} \\ & \text{EU = Emission Unit} & \text{SF}_6 = \text{Sulfur Hexafluoride} \\ & \text{MMBtu/hr = million British thermal units per hour} & \text{@ 15\% O}_2 = \text{corrected to 15 percent oxygen} \\ & \text{NO}_x = \text{Nitrogen Oxides} & \text{°F = degrees Fahrenheit} \\ & \text{O}_2 = \text{Oxygen} & \text{< = less than} \\ & \text{ppmvd = parts per million by volume dry weight} & \text{$\geq$ = greater than or equal to} \end{aligned}$ 

	Table 5		
EU	Record Keeping Requirements		
7, 8, 12	1. In accordance with 310 CMR 7.00: Appendix C (10)(b), maintain a copy of opacity monitoring data		
	for five years from the date of the monitoring or reporting.		
10, 11, 12	2. In accordance with 310 CMR 7.19(8)(e) 5, the Permittee shall maintain records to certify that the		
	ignition timing of each engine has been inspected and adjusted to 4 degrees retard relative to standard		
	timing at least once every 3 years.		
7, 8, 10,	3. In accordance with 310 CMR 7.19(8)(e) ,the Permittee shall determine the hours of operation for		
11, 12	each engine for the previous 12-month period on a monthly basis and maintain records of the		
	operating hours for each month.		
	4. In accordance with 310 CMR 7.19(13)(d) 3. and 310 CMR 7.00: Appendix C (10)(b), the Permittee		
	shall maintain for each engine, type of fuel burned each day, heat content, and total heating value		
	consumed for each day.		

	Table 5					
EU	Record Keeping Requirements					
7, 8, 10, 11, 12	5. In accordance with 310 CMR 7.00: Appendix C (10)(b), the Permittee shall maintain fuel testing					
11, 12	results and/or purchase receipts in order to demonstrate compliance with fuel sulfur content requirements in 310 CMR 7.05(1)(a)1.					
	6. In accordance with Emission Control Plan TR#79294, the Permittee shall maintain on-site, at all					
	times, a copy of the Standard Operating and Maintenance Procedure ("SOMP)" for the subject					
	engines.					
	7. In accordance with 310 CMR 7.00: Appendix C (10)(b), the Permittee shall maintain the test results of					
	any Emissions Compliance Testing (Stack Testing) performed in accordance with 310 CMR 7.13,					
	310 CMR 7.19(13)(c), and 40 CFR Part 60, Appendix A (Method 7E for NOx Methods 1 to 5 for					
	PM, Method 3A for Oxygen) or of any other testing required by MassDEP or EPA.					
	8. In accordance with 310 CMR 7.00: Appendix C (10)(b), the Permittee shall maintain records of any					
	EPA Test Method 9 opacity determinations performed according to 40 CFR Part 60, Appendix A.					
	9. In accordance with 40 CFR 63.6655, the Permittee shall keep the following records:					
	a) A copy of each notification and report that the Permittee submitted to comply with 40 CFR					
	Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or					
	Notification of Compliance Status that the Permittee submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).					
	b) Records of the occurrence and duration of each malfunction of operation (i.e. process					
	equipment) or the air pollution control and monitoring equipment.					
	c) Records of performance tests and any continuous monitoring system performance evaluations					
	and opacity and visible emissions observations as required by 40 CFR 63.10(b)(2)(viii).					
	d) Records of all required maintenance performed on the diesel oxidation catalyst.					
	e) Records to show continuous compliance with each emission or operating limitation, including					
	4-hour averages of exhaust temperature, and monthly records of pressure drop across the catalysts.					
	f) Records of actions taken during periods of malfunction to minimize emissions in accordance					
	with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and					
	air pollution control and monitoring equipment to its normal or usual manner of operation.					
13	10. In accordance with 310 CMR 7.18(8)(g), the Permittee shall maintain records sufficient to					
	demonstrate compliance. Said records shall include at a minimum, the following:					
	a) identity, quantity, formulation and density of solvent(s) used;					
	b) quantity, formulation and density of all waste solvent(s) generated;					
	c) actual operational and performance characteristics of the degreaser and any appurtenant					
	emissions capture and control equipment, if applicable; and					
	d) any other requirements specified by the Department in any approval(s) and/or order(s) issued to the person.					
	11. In accordance with 310 CMR 7.00: Appendix C (10)(b), the Permittee shall maintain records of all					
Facility-	monitoring data and supporting information required by this Operating Permit on site for five (5)					
wide	years from the date of the monitoring sample, measurement, or report.					
	12. In accordance with 310 CMR 7.71 (6) (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 document is created. The Permittee shall make these documents available to					
	MassDEP upon request. (State Only Requirement).					

Table 5		
EU	Record Keeping Requirements	
Facility- wide	13. In accordance with 310 CMR 7.00: Appendix C (10)(b), the Permittee shall maintain such records as needed for the preparation of the annual Source Registration/Emission Statement Forms pursuant to 310 CMR 7.12	
	14. "In accordance with 310 CMR 7.12(3)(c), keep copies of Source Registration and other information supplied to the Department for 5 years from the date of submittal"	

### Table 5 Key

 $CFR = Code \ of \ Federal \ Regulations \\ CMR = Code \ of \ Massachusetts \ Regulations \\ NO_x = Nitrogen \ Oxides$ 

EPA =Environmental Protection Agency PCD = Pollution Control Device

	Table 6				
EU	Reporting Requirements				
7, 8, 10, 11, 12	1. In accordance with 310 CMR 7.19(8)(e) 4, the Permittee shall submit notification to MassDEP if the operation of any engine exceeds 1000 hours for any consecutive twelve month period,				
	<ul> <li>and the Facility is subject to the emission standard in 310 CMR 7.19(8)(d).</li> <li>In accordance with 40 CFR 63.9(j), the Permittee shall notify MassDEP in writing within 15 calendar days after any engine has operated 100 hours or more in a calendar year.</li> </ul>				
	3. In accordance with 310 CMR 7.19(13)(d) 9., the Permittee shall submit compliance records within ten (10) days of written request by MassDEP or EPA.				
	4. In accordance with in 310 CMR 7.00: Appendix C(10)(a), the Permittee shall submit fuel-oil sulfur content test results, obtained from the fuel supplier and or requisite analyses, to MassDEP within thirty (30) days of the request by MassDEP.				
	5. Consistent with the requirements of ECP Approval TR#79294, the Permittee shall submit updated versions of the SOMP to MassDEP. MassDEP must be notified of significant changes prior to the submission of the updated SOMP. Unless otherwise notified by MassDEP, the updated SOMP shall supersede prior versions of the SOMP.				
	6. In accordance with 310 CMR 7.19(13)(c)1., the Permittee shall submit a pretest protocol for review and MassDEP written approval at least 60 days prior to the anticipated date of testing for NOx emissions. The Permittee shall include a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required testing in the pretest protocol as provided in 310 CMR 7.19(13)(c)2.				
	7. In accordance with 310 CMR 7.19(13)(c)6., the Permittee shall submit the emission test report for review and MassDEP written approval within 60 days of the completion of the compliance stack testing for NOx emissions.				
	8. In accordance with 310 CMR 7.13(1) and 7.13(2), if determined by MassDEP that stack testing is necessary to ascertain compliance with the Department's regulations or design approval				

Table 6		
EU	Reporting Requirements	
	conditions, the Permittee shall cause such stack testing to be summarized and submitted to MassDEP as prescribed in the agreed to pretest protocol.	
7, 8, 10, 11, 12	9. In accordance with 40 CFR 63.6640(b), the Permittee shall report each instance in which the Permittee did not meet the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ Table 2b Item 2 and Table 2d Item 3. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements of 40 CFR 63.6650.	
	10. Pursuant to 40 CFR 63.6650, the Permittee shall submit to MassDEP a semi-annual report by January 31 of each calendar year for the preceding six-month period between July and December and by July 31 of each calendar year for the preceding six-month period between January and June. If there is no deviation or malfunction, then the report shall be submitted annually by January 31 of each calendar year. Pursuant to 40 CFR 63.6650(c), the Compliance Report shall contain the following:	
	<ul> <li>a) Company name and address.</li> <li>b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.</li> <li>c) Date of report and beginning and ending dates of the reporting period.</li> <li>d) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each time of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken during a malfunction of an affected source to minimize emissions in accordance with 63.6650(b), including actions taken to correct a malfunction.</li> <li>e) If there is no deviation(s) from any applicable emission or operating limitation, then provide a statement indicating that no deviation(s) occurred during the reporting period.</li> <li>f) For each deviation from an emission or operating limitation, where you are using a Continuous Monitoring System ("CMS") to comply, you must include information in a) through d) above and in 40 CFR 63.6650(e) as follows:</li> </ul>	
	<ul> <li>i. The date and time that each malfunction started and stopped.</li> <li>ii. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.</li> <li>iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8) such as start and end dates and hours and descriptions of corrective actions taken.</li> <li>iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.</li> <li>v. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.</li> <li>vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other</li> </ul>	

Table 6	
EU	Reporting Requirements
7, 8, 10, 11, 12	known causes, and other unknown causes.  vii A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.  viii. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.  ix. A brief description of the stationary RICE.  x. A brief description of the CMS.  xi. The date of the latest CMS certification or audit.  xii. A description of any changes in CMS processes, or controls since the last reporting period.
	<ul> <li>g) Pursuant to 40 CFR 63.6650(c)(6) if there are no periods during which the Continuous Monitoring System was out of control as specified in 40 CFR 63.8(c)(7), then provide a statement that there were no periods during which the CMS was out of control during the reporting period.</li> <li>11. The Permittee shall comply with all applicable reporting requirements contained in 40 CFR Part 63 Subpart ZZZZ, "Stationary Reciprocating Internal Combustion Engines."</li> </ul>
Facility Wide	12. In accordance with 310 CMR 7.00: Appendix C(10)(f), the Permittee shall promptly report to MassDEP all instances of deviations from permit requirements (including but not limited to emission limitations/standards, SOMP) by telephone, e-mail or fax, as soon as possible, but no later than three (3) business days and followed by a written explanation within ten (10) days of discovery of such deviation.
	13. In accordance with 310 CMR 7.12, the Permittee shall submit a Source Registration/Emission Statement Form to MassDEP on an annual basis.
	14. In accordance with 310 CMR 7.00: Appendix C(10)(h) all required reports must be certified by a responsible official consistent with 310 CMR 7.00: Appendix C(5)(c).
	15. In accordance with 310 CMR 7.00: Appendix C(10)(c)., the Permittee shall report a summary of all monitoring data and related supporting information to MassDEP at least every six months (January 30 and July 30 of each calendar year).
	16. In accordance with General Condition 10 of this Permit, the Permittee shall submit the Annual Compliance report to MassDEP and EPA by January 30 of each year.
	17. In accordance with 310 CMR 7.71(5), the Permittee shall electronically submit and certify by April 15 <sup>th</sup> of each year a greenhouse gas emissions report to MassDEP. (State Only Requirement).

# Table 6 Key

CO = carbon monoxide ECP = Emission Control Plan  $NO_x = Nitrogen Oxides$ 

RICE = Reciprocating Internal Combustion Engines

### C. GENERAL APPLICABLE REQUIREMENTS

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. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

Table 7			
Regulation	Reason		
310 CMR 7.16 Reduction of Single Occupant Commuter Vehicle Use	Fewer than 250 employees		
310 CMR 7.72(3), <u>Gas Insulated</u> <u>Switchgear</u>	Gas Insulated Switchgear is not present and is not expected to be installed.		
40 CFR 60 Subpart IIII or Subpart JJJJ New Source Performance Standards	None of the Emission Units are subject, as each of their construction dates were prior to the applicability dates contained therein.		
40 CFR 64 Compliance Assurance Monitoring	The exemption at 40 CFR 64.2(b)(1)(i) applies because the emission limitation the Permittee is meeting was proposed by EPA after November 15, 1990 and pursuant to section 112 of the Clean Air Act.		

# 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:

Table 8.		
EU	Special Terms and Conditions	
8	1. In accordance with TR #X263179 and to meet the emission limits in 310 CMR 7.19(8)(c)3, the Permittee shall only operate EU 8 in dual-mode only, burning natural gas. Fuel oil shall only be used for ignition and shutdown, with natural gas as the primary fuel.	
7, 8, 10, 11, 12	2. The Permittee shall continue to equip and operate the five stationary reciprocating internal combustion engines with exhaust silencers so that sound emissions from the engines do not cause or contribute to a condition of air pollution. (State Only 310 CMR 7.10: Noise).	
	3. In accordance with 40 CFR 63.6625(g), the Permittee shall follow the manufacturer's maintenance requirements for operating and maintaining the open or closed crankcase ventilations system and replacing crankcase filters.	

Table 8.			
EU	Special Terms and Conditions		
	4. In accordance with 40 CFR 63.6625(h), the Permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.		
7, 8, 10, 11, 12	5. Emission units 7, 8, 10, 11 and 12 are subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" [as indicated in Table 8 to Subpart ZZZZ of 40 CFR 63]. The Permittee shall comply with all applicable provisions therein as required.		
Facility wide	6. In accordance with 310 CMR 7.01(1), should any nuisance condition(s) occur as a result of the operation of the engines, the Permittee shall take appropriate steps immediately to abate said nuisance condition(s). (State only)		
	7. In accordance with 310 CMR 7.00, compliance with the conditions of this Operating Permit does not relieve the Permittee from the obligation to comply with 310 CMR 7.01 and 310 CMR 7.10 when operating the approved equipment or any other activities at the Facility. (State only)		

#### Table 8 Key

EU = Emission Unit

# 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

The Permittee did not request inter-facility emissions trading in its operating permit application.

# 8. COMPLIANCE SCHEDULE

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. FEES**

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. COMPLIANCE CERTIFICATION

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, <a href="http://www.mass.gov/dep/air/approvals/aqforms.htm#op">http://www.mass.gov/dep/air/approvals/aqforms.htm#op</a>.

### 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 postmarked or delivered by January 30 to the MassDEP and to the Air Compliance Clerk, U.S. Environmental Protection Agency - New England Region. 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 postmarked or delivered 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. NONCOMPLIANCE

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. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.70, 7.71, 7.72, 7.74, 7.75 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. PERMIT TERM

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. REOPENING FOR CAUSE

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>EMERGENCY CONDITIONS</u>

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based<sup>1</sup> emission limitations specified in this Permit as a result of an emergency<sup>2</sup>. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. an emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. the permitted Facility was at the time being properly operated;

<sup>&</sup>lt;sup>1</sup> Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health-based air quality standards.

<sup>&</sup>lt;sup>2</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

- C. during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

# 25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this Permit. 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, by fax 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, <a href="http://www.mass.gov/dep/air/approvals/aqforms.htm#op">http://www.mass.gov/dep/air/approvals/aqforms.htm#op</a>.

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, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report 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. OPERATIONAL FLEXIBILITY

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 Part 82, 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. PREVENTION OF ACCIDENTAL RELEASES

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

This Facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

### 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) ) and a completed Adjudicatory Hearing Fee Transmittal Form found at http://www.mass.gov/eea/docs/dep/service/adr/adjherfm.doc must be mailed to:

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

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This 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.