



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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DEVAL L. PATRICK  
Governor

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Secretary

DAVID W. CASH  
Commissioner

### **FINAL AIR QUALITY OPERATING PERMIT**

Issued by the Massachusetts Department of Environmental Protection ("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"]:**

Fore River Energy Center, LLC  
717 Texas Avenue, Suite #1000  
Houston, TX 77002

**INFORMATION RELIED UPON:**

Application No. 4V04043  
Transmittal No. W049142  
Administrative Amendment No. SE-14-032  
Transmittal No. X263707

**FACILITY LOCATION:**

Fore River Energy Center  
9 Bridge Street  
Weymouth, MA 02191

**FACILITY IDENTIFYING NUMBERS:**

AQ ID: 1190227  
FMF FAC NO. 306579  
FMF RO NO. 306580  
SIC Code: 4911  
NAICS: 221112

**NATURE OF BUSINESS:**

Electrical Power Generation

**FACILITY CONTACT PERSON:**

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**RESPONSIBLE OFFICIAL:**

Name: Heidi M. Whidden  
Title: Director, Environmental  
Services - East

**This Operating Permit shall expire on 04/19/2016.**

For the Department of Environmental Protection, Bureau of Waste Prevention

(Replacement pages dated (12/17/14)  
Permit Chief, Bureau of Waste Prevention

(Operating Permit signed 04/19/11)  
Date

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## SPECIAL CONDITIONS FOR OPERATING PERMIT

A Legend to Abbreviated Terms found in the following Tables is located in Section 28 of the 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 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.

### **DESCRIPTION OF FACILITY AND OPERATIONS**

On November 7, 2014, ownership of the Fore River Station was transferred from Constellation Mystic Power, LLC to Fore River Energy Center, LLC and the facility will now be called Fore River Energy Center (Fore River). Fore River is an electrical power generation facility located at 9 Bridge Street in Weymouth, Massachusetts. The facility operates a 775 Megawatts (MW) output combined cycle power plant, consisting of two combustion turbines (EU1 and EU2), each rated at 250 MW output, and one steam turbine rated at 275 MW output. Each combustion turbine is equipped with a Heat Recovery Steam Generator (HRSG) and supplemental natural gas only duct firing. Each HRSG houses an oxidation catalyst for carbon monoxide (CO) control, followed by an ammonia (NH<sub>3</sub>) injection grid and selective catalytic reduction (SCR) catalyst for control of nitrogen oxides (NO<sub>x</sub>). In addition, the facility operates an auxiliary boiler (EU3) for start-up and only in the event that no other combustion turbine is in operation or if steam is not available from some other on-site steam source. Also, there is an emergency diesel generator (EU4) to shutdown the combustion turbines and only in the event that power to achieve shutdown is not available from the electric power grid. EU4 is also operated during periodic readiness testing. There is an emergency diesel fire pump (EU6) for fire protection. Natural gas and distillate fuel oil having sulfur content of (0.05 percent by weight or less) are the only fuels of use at the facility. The permittee of Fore River's two combustion turbines (EU1 and EU2), is subject to and shall comply with Phase II of the Federal Acid Rain Program as defined by EPA in 40 CFR Part 72 and has submitted an Acid Rain permit renewal application (Application No. 4B08027). The permittee of Fore River's two combustion turbines (EU1 and EU2), is subject to and shall comply with 310 CMR 7.32, Massachusetts Clean Air Interstate Rule (CAIR), and has submitted a CAIR permit application (Application No. 4B07043) pursuant to 310 CMR 7.32(3). The permittee of (EU1 and EU2) is subject to 310 CMR 7.70, the Massachusetts CO<sub>2</sub> Budget Trading Program, and shall comply with all applicable requirements therein and MassDEP Approval No. 4B08039, dated December 17, 2008. The facility is subject to 310 CMR 7.71, Reporting of Greenhouse Gas Emissions to a Regional Registry (GHG), and shall comply with all applicable requirements therein. The combustion turbines are also subject to the New Source Performance Standards (NSPS) for Stationary Combustion Turbines (40 CFR Part 60, Subpart GG), and the NSPS for Electric Utility Steam Generating Units (40 CFR Part 60, Subpart Da) for the supplemental duct fired HRSGs. The auxiliary boiler is subject to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60, Subpart Dc). The emergency diesel generator and emergency

diesel fire pump are subject to the requirements of US EPA's 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE).

EPA issued a Prevention of Significant Deterioration (PSD) Permit No. 047-119-MA08, on December 14, 2006.

In accordance with 40 CFR Part 64.2, Compliance Assurance Monitoring (CAM) does not apply to Fore River.

Lastly, the facility is not a major source of Hazardous Air Pollutants (HAPs), as it does not have the Potential to Emit  $\geq 10$  tons per year of any single HAP or  $\geq 25$  tons per year of all HAPs combined.

## **2. EMISSION UNIT IDENTIFICATION**

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

<b>TABLE 1</b>			
<b>EU#</b>	<b>DESCRIPTION OF EMISSION UNIT</b>	<b>EU DESIGN CAPACITY</b>	<b>POLLUTION CONTROL DEVICE</b>
EU1	Mitsubishi Heavy Industries Model No. 501G Combustion Turbine/Deltak Heat Recovery Steam Generator with Duct Burner (#11) (Combined Cycle)	2,955 MMBTU/hr (during natural gas firing)  3,001 MMBTU/hr (during oil firing)	Dry Low NOx Combustors Selective Catalytic Reduction CO Oxidation Catalyst
EU2	Mitsubishi Heavy Industries Model No. 501G Combustion Turbine/Deltak Heat Recovery Steam Generator with Duct Burner (#12) (Combined Cycle)	2,955 MMBTU/hr (during natural gas firing)  3,001 MMBTU/hr (during oil firing)	Dry Low NOx Combustors Selective Catalytic Reduction CO Oxidation Catalyst
EU3	Nebraska Model No. NS-E-68SH Auxiliary Boiler	83 MMBTU/hr	Low NOx Burner Flue Gas Recirculation
EU4	Detroit Diesel Model No. T1237K36 Emergency Diesel Generator	1500 KW or 15.4 MMBTU/hr 2,200 Horsepower	None
EU5	Safety Kleen Model No. 250 Cold Cleaning Degreaser (Parts Washer)	< 100 gallons/month	None
EU6	Caterpillar Diesel Model No. 3406 Emergency Diesel Fire Pump	2.6 MMBTU/hr 331 Horsepower	None

### **Table 1 Key:**

EU# = Emission Unit Number  
 # = Number  
 MMBTU/hr = million British Thermal Units per hour  
 KW = Kilowatts  
 NO<sub>x</sub> = Oxides of Nitrogen  
 CO = Carbon Monoxide

**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):

<b>Table 2</b>	
<b>Description of Current Exempt Activities</b>	<b>Reason</b>
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 Department'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)

## 4. APPLICABLE REQUIREMENTS

### A. EMISSION LIMITS AND RESTRICTIONS

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

<b>TABLE 3</b>					
<b>EU#</b>	<b>RESTRICTION</b>	<b>FUEL/RAW MATERIAL</b>	<b>POLLUTANT</b>	<b>EMISSION LIMIT/STANDARD</b>	<b>APPLICABLE REGULATION AND/OR APPROVAL NUMBER</b>
EU1, EU2	Operation at $\geq$ 55% power or load, excluding start-ups and shutdowns and fuel transfers	Natural Gas	NO <sub>x</sub>	$\leq$ 21.8 lb/hr (5, 6) $\leq$ 0.0074 lb/MMBTU (5, 6) $\leq$ 2.0 ppmvd @ 15% O <sub>2</sub> (5, 6)	MBR-99-COM-018 EPA No. 047-119-MA08
			CO	$\leq$ 13.3 lb/hr (5, 6) $\leq$ 0.0045 lb/MMBTU (5, 6) $\leq$ 2.0 ppmvd @ 15% O <sub>2</sub> (5, 6)	
			SO <sub>2</sub>	$\leq$ 6.8 lb/hr (5, 6) $\leq$ 0.0023 lb/MMBTU (5, 6)	
			PM	$\leq$ 32.5 lb/hr (5, 6) $\leq$ 0.011 lb/MMBTU (5, 6)	
			NH <sub>3</sub>	$\leq$ 8.0 lb/hr (5, 6) $\leq$ 0.0027 lb/MMBTU (5, 6) $\leq$ 2.0 ppmvd @ 15% O <sub>2</sub> (5, 6)	
			Opacity	< 5%, except 5 to < 10% for $\leq$ 2 minutes during any hour	
			VOC (no duct firing)	$\leq$ 3.8 lb/hr (5, 6) $\leq$ 0.0013 lb/MMBTU (5, 6) $\leq$ 1.0 ppmvd @ 15% O <sub>2</sub> (5, 6)	MBR-99-COM-018
			VOC (duct-fired)	$\leq$ 6.4 lb/hr (5, 6) $\leq$ 0.0022 lb/MMBTU (5, 6) $\leq$ 1.7 ppmvd @ 15% O <sub>2</sub> (5, 6)	
EU1, EU2 (cont.)	Start-ups and shutdowns (cont.)	Natural Gas (cont.)	NO <sub>x</sub>	$\leq$ 400 lb/hr (3) $\leq$ 0.46 lb/MMBTU (3) $\leq$ 125 ppmvd @ 15% O <sub>2</sub> (3)	MBR-99-COM-018 EPA No. 047-119-MA08
			CO (during first 60 minutes of start-up)	$\leq$ 2000 lb/hr (3) $\leq$ 2.5 lb/MMBTU (3) $\leq$ 1100 ppmvd @ 15% O <sub>2</sub> (3)	
			CO (after first 60 minutes of start-up and for shutdowns)	$\leq$ 400 lb/hr (3) $\leq$ 0.224 lb/MMBTU (3) $\leq$ 100 ppmvd @ 15% O <sub>2</sub> (3)	
			SO <sub>2</sub>	$\leq$ 4.7 lb/hr (3) $\leq$ 0.0023 lb/MMBTU (3)	
			PM/PM <sub>10</sub>	$\leq$ 40 lb/hr (3) $\leq$ 0.050 lb/MMBTU (3)	
			NH <sub>3</sub>	$\leq$ 10.0 lb/hr (3) $\leq$ 0.007 lb/MMBTU (3) $\leq$ 5.0 ppmvd @ 15% O <sub>2</sub> (3)	MBR-99-COM-018 EPA No. 047-119-MA08 (cont.)

**TABLE 3**

EU#	RESTRICTION	FUEL/RAW MATERIAL	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER			
			VOC	$\leq 200$ lb/hr (3, 4, 9) $\leq 0.26$ lb/MMBTU (3, 4, 9) $\leq 200$ ppmvd @ 15% O <sub>2</sub> (3, 4, 9)	MBR-99-COM-018			
	NA	Natural Gas	S in Fuel	$\leq 0.8$ grains per 100 cubic feet	MBR-99-COM-018 EPA No. 047-119-MA08			
	Operation at $\geq 55\%$ power or load, excluding start-ups and shutdowns and fuel transfers	Transportation Distillate Fuel Oil $\leq 0.05\%$ S by weight or Cleaner Fuel Oil  <i>See "Special Terms and Conditions", Section 5(u)</i>	NO <sub>x</sub>	$\leq 65.7$ lb/hr (5, 6) $\leq 0.0233$ lb/MMBTU (5, 6) $\leq 6.0$ ppmvd @ 15% O <sub>2</sub> (5, 6)				
CO			$\leq 46.5$ lb/hr (5, 6) $\leq 0.0166$ lb/MMBTU (5, 6) $\leq 7.0$ ppmvd @ 15% O <sub>2</sub> (5, 6)					
SO <sub>2</sub>			$\leq 143.5$ lb/hr (5, 6, 19) $\leq 0.0522$ lb/MMBTU (5, 6, 19) $\leq 4.7$ lb/hr (5, 6, 20) $\leq 0.0015$ lb/MMBTU (5, 6, 20)					
PM			$\leq 139.6$ lb/hr (5, 6) $\leq 0.05$ lb/MMBTU (5, 6)					
NH <sub>3</sub>			$\leq 8.6$ lb/hr (5, 6) $\leq 0.0029$ lb/MMBTU (5, 6) $\leq 2.0$ ppmvd @ 15% O <sub>2</sub> (5, 6)					
Opacity			$< 10\%$ , except 10 to $< 15\%$ for $\leq 2$ minutes during any hour					
VOC (no duct firing)			$\leq 26.0$ lb/hr (5, 6) $\leq 0.0095$ lb/MMBTU (5, 6) $\leq 7.0$ ppmvd @ 15% O <sub>2</sub> (5, 6)	MBR-99-COM-018				
VOC (duct-fired)			$\leq 28.4$ lb/hr (5, 6) $\leq 0.0095$ lb/MMBTU (5, 6) $\leq 7.0$ ppmvd @ 15% O <sub>2</sub> (5, 6)					
			$\leq 29,074,350$ gallons of Transportation Distillate Fuel Oil $\leq 0.05\%$ S by weight per 12-month rolling period  <i>See "Special Terms and Conditions", Section 5(t)</i>	Transportation Distillate Fuel Oil $\leq 0.05\%$ S by weight or Cleaner Fuel Oil  <i>See "Special Terms and Conditions", Section 5(u)</i>		NO <sub>x</sub>	$\leq 50.0$ tons per 12-month rolling period	MBR-99-COM-018 EPA No. 047-119-MA08
CO						$\leq 96.0$ tons per 12-month rolling period		
SO <sub>2</sub>	$\leq 103.0$ tons per 12-month rolling period							
PM	$\leq 100.0$ tons per 12-month rolling period							
NH <sub>3</sub>	$\leq 6.0$ tons per 12-month rolling period							
VOC	$\leq 22.0$ tons per 12-month rolling period	MBR-99-COM-018						



**TABLE 3**

EU#	RESTRICTION	FUEL/RAW MATERIAL	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU1, EU2 (cont.)	NA	Transportation Distillate Fuel Oil $\leq 0.05\%$ S by weight or Cleaner Fuel Oil <i>See "Special Terms and Conditions", Section 5(u)</i> (cont.)	S in Fuel	$\leq 0.05\%$ by weight	MBR-99-COM-018 EPA No. 047-119-MA08 (cont.)
		Natural Gas and Transportation Distillate Fuel Oil $\leq 0.05\%$ S by weight or Cleaner Fuel Oil <i>See "Special Terms and Conditions", Section 5(u)</i>	NO <sub>x</sub>	$\leq 0.0075\%$ by volume @ 15% O <sub>2</sub> , dry basis (13)	40 CFR Part 60, Subpart GG
			SO <sub>2</sub>	$\leq 0.015\%$ by volume @ 15% O <sub>2</sub> , dry basis	
			S in Fuel	$\leq 0.8\%$ by weight	
		Natural Gas	SO <sub>2</sub>	$\leq 0.80$ lb/MMBTU and $\leq 10\%$ of potential combustion concentration (90% reduction) (10, 12) or 100% of potential combustion concentration (0% reduction) and $\leq 0.20$ lb/MMBTU (10, 12)	40 CFR Part 60, Subpart Da
			NO <sub>x</sub>	$\leq 1.6$ pounds per megawatt-hour gross energy output (11, 12)	
			PM	$\leq 0.03$ lb/MMBTU (12)	
			Opacity	$\leq 20\%$ (6 minute average), except $> 20$ to $\leq 27\%$ for $\leq 6$ minutes during any hour (12)	
		All Fuels	NO <sub>x</sub>	<i>See "Special Terms and Conditions", Section 5(e)</i>	310 CMR 7.32
			SO <sub>2</sub>	$\leq 1.2$ lb/MMBTU (1)	310 CMR 7.22(1)
				<i>See "Special Terms and Conditions", Section 5(c)</i>	40 CFR Part 73
		CO <sub>2</sub>	Hold CO <sub>2</sub> allowances available for compliance (16, 17)	Approval No. 4B08039 310 CMR 7.70(1)(e)3.a.	

**TABLE 3**

EU#	RESTRICTION	FUEL/RAW MATERIAL	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER	
EU1, EU2 (cont.)	NA (cont.)	All Fuels (cont.)	CO <sub>2</sub>	CO <sub>2</sub> allowance transfers	Approval No. 4B08039 310 CMR 7.70(7)	
EU3	$\leq 132,000,000$ cubic feet of Natural Gas per 12-month rolling period <i>See "Special Terms and Conditions", Section 5(v)</i>	Natural Gas	NO <sub>x</sub>	$\leq 3.4$ lb/hr (7) $\leq 0.035$ lb/MMBTU (7)	MBR-99-COM-018 EPA No. 047-119-MA08 310 CMR 7.19(5)	
			CO	$\leq 7.7$ lb/hr (7) $\leq 0.08$ lb/MMBTU (7) $\leq 100$ ppmvd @ 3% O <sub>2</sub> (7)		
			SO <sub>2</sub>	$\leq 0.3$ lb/hr (7) $\leq 0.0029$ lb/MMBTU (7)		
			PM	$\leq 0.7$ lb/hr (7) $\leq 0.007$ lb/MMBTU (7)		
			S in Fuel	$\leq 0.8$ grains per 100 cubic feet		
			VOC	$\leq 0.8$ lb/hr (7) $\leq 0.008$ lb/MMBTU (7)		MBR-99-COM-018
	$\leq 24,000$ MMBTU of Fuel Oil per 12-month rolling period and $\leq 177,778$ gallons of Transportation Distillate Fuel Oil $\leq 0.05\%$ S by weight per 12-month rolling period  <i>See "Special Terms and Conditions", Section 5(v)</i>	Transportation Distillate Fuel Oil $\leq 0.05\%$ S by weight or Cleaner Fuel Oil  <i>See "Special Terms and Conditions", Section 5(u)</i>	NO <sub>x</sub>	$\leq 9.6$ lb/hr (7) $\leq 0.10$ lb/MMBTU (7)	MBR-99-COM-018 EPA No. 047-119-MA08 310 CMR 7.19(5)	
			CO	$\leq 7.7$ lb/hr (7) $\leq 0.08$ lb/MMBTU (7) $\leq 100$ ppmvd @ 3% O <sub>2</sub> (7)		
			SO <sub>2</sub>	$\leq 5.01$ lb/hr (7) $\leq 0.0522$ lb/MMBTU (7)		
			PM	$\leq 7.7$ lb/hr (7) $\leq 0.08$ lb/MMBTU (7)		
			S in Fuel	$\leq 0.05\%$ by weight		
			VOC	$\leq 0.384$ lb/hr (7) $\leq 0.004$ lb/MMBTU (7)		MBR-99-COM-018
			S in Fuel	$\leq 0.5\%$ by weight (14)		
			Opacity	$\leq 20\%$ (6 minute average), except $> 20$ to $\leq 27\%$ for $\leq 6$ minutes during any hour (15)		40 CFR Part 60, Subpart Dc and 310 CMR 7.04(2)
$\leq 132,000$ MMBTU of total combined fuel per 12-month rolling period and $15,600$ MMBTU per month <i>See "Special Terms and Conditions", Sections 5(v) and 5(w)</i>	Natural Gas and Transportation Distillate Fuel Oil $\leq 0.05\%$ S by weight or Cleaner Fuel Oil  <i>See "Special Terms and Conditions", Section 5(u)</i>	Opacity	$< 10\%$ , except 10 to $< 15\%$ for $\leq 2$ minutes during any hour	MBR-99-COM-018 EPA No. 047-119-MA08 and 310 CMR 7.04(2)		

**TABLE 3**

EU#	RESTRICTION	FUEL/RAW MATERIAL	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU4	≤ 17,111 gallons of Fuel Oil combusted per 12-month rolling period, including periodic readiness testing and emergency use	Transportation Distillate Fuel Oil ≤ 0.05% S by weight or Cleaner Fuel Oil  See "Special Terms and Conditions", Section 5(u)	NO <sub>x</sub>	≤ 31.77 lb/hr (8) ≤ 6.55 g/bhp-hr (8)	MBR-99-COM-018 EPA No. 047-119-MA08 40 CFR Part 63, Subpart ZZZZ  See "Special Terms and Conditions", Section 5(s)
			CO	≤ 2.57 lb/hr (8) ≤ 0.53 g/bhp-hr (8)	
			SO <sub>2</sub>	≤ 0.95 lb/hr (8) ≤ 0.17 g/bhp-hr (8)	
			PM	≤ 0.728 lb/hr (8) ≤ 0.15 g/bhp-hr (8)	
			S in Fuel	≤ 0.05% by weight	
			Opacity	< 10%, except 10 to < 15% for ≤ 2 minutes during any one hour	
			VOC	≤ 1.16 lb/hr (8) ≤ 0.20 g/bhp-hr (8)	MBR-99-COM-018
EU5	< 100 gallons/month	Solvent	VOC	Solvent vapor pressure ≤ 1.0 mm Hg at 20° C	310 CMR 7.18(8) 310 CMR 7.03(8)
EU6	NA	Transportation Distillate Fuel Oil ≤ 0.05% S by weight or Cleaner Fuel Oil See "Special Terms and Conditions", Section 5(u)	NA	See "Special Terms and Conditions", Section 5(s)	40 CFR Part 63, Subpart ZZZZ
EU1,EU2,EU3, EU4	See "Special Terms and Conditions", Section 5(v) See "Special Terms and Conditions", Section 5(v)	All Fuels	NO <sub>x</sub>	≤ 218 tons per 12-month rolling period	MBR-99-COM-018 EPA No. 047-119-MA08
			CO	≤ 296 tons per 12-month rolling period	
			SO <sub>2</sub>	≤ 154 tons per 12-month rolling period	
			PM	≤ 352 tons per 12-month rolling period	
			NH <sub>3</sub>	≤ 67 tons per 12-month rolling period	
			VOC	≤ 71.5 tons per 12-month rolling period	MBR-99-COM-018
Facility-Wide	NA	All Fuels	Noise	See "Special Terms and Conditions", Section 5(d)	MBR-99-COM-018
			Smoke	< No. 1 of Chart (2), except No. 1 to < No. 2 of Chart for ≤ 6 minutes during any one hour	310 CMR 7.06(1)(a)
			Greenhouse Gas (18)	NA	310 CMR 7.71 (State Only Requirement)

<b>TABLE 3</b>					
<b>EU#</b>	<b>RESTRICTION</b>	<b>FUEL/RAW MATERIAL</b>	<b>POLLUTANT</b>	<b>EMISSION LIMIT/STANDARD</b>	<b>APPLICABLE REGULATION AND/OR APPROVAL NUMBER</b>
Facility-Wide (except EU1, EU2, EU3, EU4)	NA	All Fuels	Opacity	≤ 20%, except > 20% to ≤ 40% for ≤ 2 minutes during any one hour	310 CMR 7.06(1)(b)

**Table 3 Key:**

EU# = Emission Unit Number  
 lb/MMBTU = pound(s) per million British Thermal Units  
 lb/hr = pound(s) per hour  
 ppmvd @ 15% O<sub>2</sub> = parts per million, dry volume basis corrected to 15 percent Oxygen  
 ppmvd @ 3% O<sub>2</sub> = parts per million, dry volume basis corrected to 3 percent Oxygen  
 g/bhp-hr = gram(s) per brake horsepower hour  
 MMBTU = million British Thermal Units  
 BTU = British Thermal Units  
 NO<sub>x</sub> = Nitrogen Oxides  
 CO = Carbon Monoxide  
 VOC = Volatile Organic Compounds  
 PM = Particulate Matter  
 PM<sub>10</sub> = Particulate Matter less than 10 microns in aerodynamic diameter  
 S = Sulfur  
 SO<sub>2</sub> = Sulfur Dioxide  
 NH<sub>3</sub> = Ammonia  
 O<sub>2</sub> = Oxygen  
 % = percent  
 < = less than  
 > = greater than  
 ≤ = less than or equal to  
 ≥ = greater than or equal to  
 NA = Not Applicable  
 No. = Number  
 HRSG = Heat Recovery Steam Generator

MBR-99-COM-018 = MassDEP Final Approval No. MBR-99-COM-018, dated March 20, 2006

EPA No. 047-119-MA08 = U.S. Environmental Protection Agency, Prevention of Significant Deterioration, Permit No. 047-119-MA08, dated December 14, 2006

Approval No. 4B08039 = MassDEP Final Approval No. 4B08039, dated December 17, 2008

40 CFR Part 60, Subpart GG = New Source Performance Standards for Stationary Combustion Turbines.

40 CFR Part 60, Subpart Da = New Source Performance Standards for Electric Utility Steam Generating Units for supplemental duct fired HRSGs.

40 CFR Part 60, Subpart Dc = New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units for the auxiliary boiler.

**Table 3 Notes:**

- 1 In accordance with 310 CMR 7.22(1), compliance shall be based on a calendar year averaging time. The provisions of 310 CMR 7.22 are State-Only Requirements.
- 2 Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by MassDEP.
- 3 Emission limits are based on a one-hour averaging period and apply to the first complete block hour. Partial hours are excluded from start-up and shutdown emission limits.
- 4 In accordance with MassDEP Approval No. MBR -99-COM-018, Section XIV, Condition No. 2, for EU1 and EU2, Fore River conducted VOC diagnostic testing on June 13, 2006 and the results are contained in EBI Consulting's submittal to MassDEP, dated August 31, 2006.
- 5 Emission limits are one-hour block averages and do not apply during start-up/shutdown, fuel transfers and equipment cleaning. Operation below 55% power is limited to no more than 5.0 hours duration for startups, 3.0 hours for fuel transfers and 2.0 hours for shutdowns, or for a duration that may be otherwise practical to achieve start-up from a cold, warm or hot turbine condition. Emissions during these periods shall be included in the annual tonnage limits.
- 6 Emission rates are for one combustion turbine (EU1 or EU2), based on 100% load while firing either natural gas or transportation distillate fuel oil at -12°F ambient conditions and firing natural gas only supplemental duct fired HRSG burners. These conditions constitute worst-case conditions.
- 7 Emission limits for the auxiliary boiler are one-hour block averages and apply over the normal operating range up to 100% load.
- 8 Emission limits for the emergency diesel generator are one-hour block averages and apply over the normal operating range up to 100% load.
- 9 Whenever any gas turbine is operating below 55% power or load, the VOC emissions shall be considered as occurring at the rate determined during compliance testing for start up conditions.
- 10 Compliance with the emission limit/standard and percent reduction are both determined on a 30-day rolling average basis, and as otherwise provided in the Custom Monitoring Schedule issued by EPA on July 3, 2002.
- 11 Compliance with the emission limit/standard determined on a 30-day rolling average basis, or as otherwise provided in the Custom Monitoring Schedule issued by EPA on July 3, 2002.
- 12 Emission limit/standard applies to supplemental duct firing HRSG burners only and as otherwise provided in the Custom Monitoring Schedule issued by EPA on July 3, 2002. Supplemental duct firing HRSG burners are subject to NSPS for Electric Utility Steam Generating Units (40 CFR Part 60, Subpart Da) and only fire natural gas, whereas the combustion turbines (EU1 and EU2) are subject to NSPS for Stationary Combustion Turbines (40 CFR Part 60, Subpart GG) and may be burn either natural gas or transportation distillate fuel oil.
- 13 Emission limit/standard is not applicable during water injection for distillate oil firing when ice fog is deemed a traffic hazard.

- 14** In accordance with 40 CFR 60.42c(g) and (i) for EU3, fuel oil sulfur limit shall be determined on a 30-day rolling average basis and applies at all times, including periods of start-up, shutdown, and malfunction.
- 15** In accordance with 40 CFR 60.43c(d) for EU3, opacity standard applies at all times, except during periods of start-up, shutdown or malfunction.
- 16** Compliance with CO<sub>2</sub> allowances shall be based on the control period. The control period is a three-calendar-year time period, unless extended to four years upon occurrence of a stage two trigger event. Control period and stage two trigger event are defined at 310 CMR 7.70(1)(b).
- 17** Hold CO<sub>2</sub> allowances available for compliance deductions under 310 CMR 7.70(6)(e), as of the CO<sub>2</sub> allowance transfer deadline, in the source's compliance account in an amount not less than the total CO<sub>2</sub> emissions for the control period from all CO<sub>2</sub> budget units at the source, as determined in accordance with 310 CMR 7.70(6) and (8).
- 18** Greenhouse Gas (GHG) 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), and perfluorocarbons(PFCs).
- 19** In accordance with MassDEP Approval No. MBR-99-COM-018, EPA PSD Permit No. 047-119-MA08 and Operating Permit Application No. 4V04043 (Revision No. 2 – November 2009), SO<sub>2</sub> emission limits while firing transportation distillate fuel oil having a sulfur content of 0.05% by weight.
- 20** In accordance with MassDEP Approval No. MBR-99-COM-018, EPA PSD Permit No. 047-119-MA08 and Operating Permit Application No. 4V04043 (Revision No. 1 – June 2008), SO<sub>2</sub> emission limits while firing distillate fuel oil at 0.003% sulfur by weight or less (e.g. Ultra Low Sulfur Distillate fuel oil).

**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), as well as the applicable requirements contained in Table 3:

<b>TABLE 4</b>	
<b>EU#</b>	<b>MONITORING/TESTING REQUIREMENTS</b>
EU1, EU2	In accordance with MassDEP Approval MBR-99-COM-018, monitor NO <sub>x</sub> emissions with CEMS.
	In accordance with MassDEP Approval MBR-99-COM-018, compliance with NH <sub>3</sub> emission limits/standards shall be demonstrated with CEMS.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall monitor the level of ammonia in the ammonia storage tanks with high and low level audible alarm monitors.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, monitor on a continuous basis temperatures at the inlets to the SCR and CO catalysts with continuous monitors equipped with alarm systems.
	In accordance with MassDEP Approval MBR-99-COM-018, compliance with CO emission limits/standards shall be demonstrated with CEMS. Monitor CO emissions with CEMS certified in accordance with the performance specifications contained in 40 CFR Part 60, Appendix B and use the procedures contained in 40 CFR Part 60, Appendix F to comply, provide quality assurance and quality control.
	In accordance with the Acid Rain Program 40 CFR Part 72, and MassDEP Approval MBR-99-COM-018, calculate hourly SO <sub>2</sub> mass emissions from fuel flow measuring, fuel sampling/analysis, and heat input data using the procedures in 40 CFR Part 75, Appendix D.
	Measure hourly fuel flow with flow meters and perform sampling and analysis of fuel to determine sulfur content, heat content, and for fuel oil, density or specific gravity, pursuant to 40 CFR Part 75, Appendix D and use the procedures contained therein to gather and analyze data, provide quality assurance and quality control.
	Compliance with the SO <sub>2</sub> emission rate under the Massachusetts Acid Rain Law 310 CMR 7.22 shall be demonstrated through monitoring for and compliance with allowable fuel sulfur limits, monitoring as required using the procedures in 40 CFR Part 75, Appendix D, and combustion of Natural Gas.
	In accordance with the Acid Rain Program 40 CFR Part 72, calculate carbon dioxide (CO <sub>2</sub> ) emissions in the flue gas from heat input data utilizing the procedures in 40 CFR Part 75, Appendix G.
	In accordance with the Acid Rain Program 40 CFR Part 72 and 40 CFR Part 75, and MassDEP Approval MBR-99-COM-018, compliance with opacity shall be demonstrated utilizing Continuous Opacity Monitoring Systems (COMS). The opacity COMS shall meet Performance Specification 1 of 40 CFR Part 60, Appendix B. Compliance with 40 CFR Part 75 shall constitute compliance with this requirement.
	Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., opacity shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 in the event of COMS malfunction. This method shall also apply to any detached plumes.
	In accordance with 40 CFR Part 75 and MassDEP Approval MBR-99-COM-018, measure operating time of each EU and the date and amount of time that any CEMS or COMS are inoperative.
	In the event that CEMS are inoperative, comply with 40 CFR Part 75, Subpart D for CO <sub>2</sub> emissions and heat input missing data substitution.
	In accordance with 40 CFR Part 75 and MassDEP Approval MBR-99-COM-018, monitor any occurrences when visible emissions (opacity and/or smoke exclusive of uncombined water) and emission rates of NO <sub>x</sub> , NH <sub>3</sub> , CO, VOC, and SO <sub>2</sub> , as applicable, are in excess of the emission limits/standards contained in Table 3.
	In accordance with MassDEP Approval MBR-99-COM-018, measure oxygen (O <sub>2</sub> ) in the flue gas with CEMS that meet the requirements of 40 CFR Part 75.



**TABLE 4**

<b>EU#</b>	<b>MONITORING/TESTING REQUIREMENTS</b>
EU1, EU2 (cont.)	Monitor/test in accordance with NSPS for Stationary Combustion Turbines (40 CFR Part 60, Subpart GG) for the combustion turbines and NSPS for Electric Utility Steam Generating Units (40 CFR Part 60, Subpart Da) for the supplemental duct firing HRSG burners, as applicable.
	In accordance with MassDEP Approval MBR-99-COM-018, monitor gas turbine inlet and ambient temperatures.
	In accordance with Operating Permit No. 4V04043, MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, monitor sulfur and nitrogen content in the Natural Gas on a daily basis, or pursuant to any alternative fuel monitoring schedule issued in accordance with NSPS 40 CFR Part 60, Subpart GG 60.334 and Subpart Da. Provided that the permittee uses pipeline-quality Natural Gas, the permittee shall monitor only sulfur content according to the requirements of 40 CFR 60.334(h)(3)(ii), which supersedes the frequency schedule established within the Custom Monitoring Schedule issued by EPA on April 3, 2002. 40 CFR 60.334(h)(3)(ii), defaults to the sulfur monitoring requirements of Appendix D (Paragraph 2.3.1.4(e)) of 40 CFR 75 for pipeline natural gas. On-going sampling of the fuel's sulfur content is required annually and whenever the fuel supply source changes. Sampling "annually" means that at least one sample is taken in each calendar year.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, monitor sulfur and nitrogen content in the transportation diesel fuel oil (with a sulfur content that does not exceed 0.05 percent by weight) on each occasion that the fuel oil is transferred to the bulk storage tank, or pursuant to any alternative fuel monitoring schedule issued in accordance with NSPS 40 CFR Part 60, Subpart GG 60.334 and Subpart Da. Monitor the sulfur content of Fuel Oil in accordance with the frequency schedule established within the Custom Monitoring Schedule issued by EPA on April 3, 2002.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, operate a continuous monitoring system to record the transportation diesel fuel oil (with a sulfur content that does not exceed 0.05 percent by weight) consumption and the ratio of water-to-fuel oil being fired, or pursuant to any alternative fuel monitoring schedule issued in accordance with NSPS 40 CFR Part 60, Subpart GG 60.334 and Subpart Da.
	The permittee shall comply with the Continuous Emissions Monitoring Quality Assurance and Quality Control Procedures and Initial Performance Test Methods and Procedures as stated in the Custom Monitoring Schedule issued by EPA on July 3, 2002.
	In accordance with MassDEP Approval MBR-99-COM-018, monitor audible and visible alarms on CEMS and COMS that activate whenever emissions exceed the limits in Table 3.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, operate each CEMS and COMS servicing the facility at all times except for periods of CEMS and COMS calibration checks, zero and span adjustments, preventative maintenance, and periods of unavoidable malfunction.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall use and maintain its CEMS and COMS servicing the facility as "direct-compliance" monitors to measure NO <sub>x</sub> , CO, O <sub>2</sub> , NH <sub>3</sub> , and Opacity. "Direct-compliance" monitors generate data that legally documents the compliance status of a source.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall obtain emission data from each CEMS and COMS servicing the facility for at least 75% of the emission unit's operating hours per day, for at least 75% of the emission unit's operating hours per month, and for at least 95% of the emission unit's operating hours per quarter, except for periods of CEMS and COMS calibration checks, zero and span adjustments, and preventive maintenance.
	In accordance with Operating Permit No. 4V04043, MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall comply with all applicable testing requirements contained in 40 CFR Parts 60, 72 and 75, regarding the subject facility.

**TABLE 4**

EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2 (cont.)	In accordance with Operating Permit No. 4V04043, MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall continue to comply with its quality control/quality assurance (QA/QC) program, which was submitted to comply with the requirements of Proviso XI. 17 of the May 5, 2000 MassDEP Conditional Approval and Proviso XI. 17 of the May 5, 2000 EPA Prevention of Significant Deterioration Permit. This QA/QC program has been developed for the long-term operation of the CEMS and COMS servicing the subject facility which conforms to 40 CFR Part 60, Appendix F, all applicable portions of 40 CFR Parts 72 and 75.
	In accordance with 310 CMR 7.70(8)(a)1.a. and MassDEP Approval No. 4B08039, install all monitoring systems necessary to monitor CO <sub>2</sub> mass emissions in accordance with 40 CFR Part 75, except equation G-1 in Appendix G shall not be used to determine CO <sub>2</sub> emissions under 310 CMR 7.70(8). (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(a)2.a. and MassDEP Approval No. 4B08039, each CO <sub>2</sub> budget unit that commenced commercial operation before July 1, 2008, must be in compliance with the requirements of 310 CMR 7.70(8) by January 1, 2009. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(h)1. and MassDEP Approval No. 4B08039, submit to the Department or its agent net electrical output. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(h)4.a. and MassDEP Approval No. 4B08039, the billing meter shall record the electric output. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(h)5.c. and MassDEP Approval No. 4B08039, when a component of output measurement equipment fails to pass an accuracy test, all data shall be replaced by either zero or an output value that is approved as part of the monitoring plan required under 310 CMR 7.70(8)(h)3. until the component passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test. (State Only Requirement)
EU3	In accordance with MassDEP Approval MBR-99-COM-018, measure the amount of Natural Gas and fuel oil consumed monthly. Utilize this information to calculate total monthly heat input from all fuels combusted.
	In accordance with MassDEP Approval MBR-99-COM-018, comply with 310 CMR 7.19(13)(d)3. which states monitor on a daily basis: type(s) fuel burned, heat content of each fuel, total consumption of each fuel, and total heating value of each fuel consumed.
	Monitor/test in accordance with NSPS for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60, Subpart Dc), as applicable.
	In accordance with 310 CMR 7.04(2)(a) and Operating Permit No. 4V04043, while burning oil, operate continuously and maintain in an accurate operating condition a smoke density indicator equipped with an audible alarm and recorder that signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart.
	In accordance with 310 CMR 7.04(4)(a), inspect and maintain fuel utilization facility in accordance with manufacturer's recommendations and test for efficient operation at least annually.
EU4	In accordance with MassDEP Approval MBR-99-COM-018, measure the amount of fuel oil burned on a monthly basis.
EU5	In accordance with 310 CMR 7.18(8)(h), use MassDEP/EPA approved test methods as required.
EU1, EU2, EU3, EU4	Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2. and MassDEP Approval MBR-99-COM-018, monitor unit operations, as necessary, to ensure continuous compliance with PM or PM <sub>10</sub> emission limits, as applicable.
	Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., monitor sulfur content of each new shipment of fuel oil received. Compliance with the sulfur content of the fuel oil can be demonstrated through fuel oil analysis. The analysis of sulfur content of the 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. Fuel oil sulfur information may be provided by fuel oil suppliers.

**TABLE 4**

<b>EU#</b>	<b>MONITORING/TESTING REQUIREMENTS</b>
EU1, EU2, EU3, EU4 (cont.)	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, all periods of excess emissions at the facility, even if attributable to an emergency/malfunction, start up/shutdown or equipment cleaning, shall be quantified and included in the determination of annual emissions and compliance with the annual emission limits as stated in Table 3 of this Operating Permit as they apply to the total emissions from EU1, EU2, EU3, and EU4 combined. "Excess Emissions" are defined as emissions that are in excess of the short-term emissions as stipulated in Table 3. An exceedance of emission limits in Table 3 due to an emergency or malfunction shall not be deemed a federally permitted release as that term is used in 42 U.S.C. Section 9601(10).
Facility-Wide	<p>In accordance with 310 CMR 7.13(1), any person owning, leasing, operating or controlling a facility for which MassDEP has determined that stack testing is necessary to ascertain compliance with MassDEP's regulations or design Approval provisos shall cause such stack testing:</p> <p>(a) to be conducted by a person knowledgeable in stack testing,</p> <p>(b) to be conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and</p> <p>(c) to be conducted in the presence of a representative of MassDEP when such is deemed necessary.</p> <p>In accordance with Approval MBR-99-COM-018, conduct any other testing or testing methodology if and when requested by MassDEP.</p> <p>Monitor operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.</p> <p>In accordance with 310 CMR 7.71(1) and Appendix C(9) 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)</p>

**Table 5**

<b>EU#</b>	<b>RECORD KEEPING REQUIREMENTS</b>
EU1, EU2	In accordance with MassDEP Approval MBR-99-COM-018, record on a continuous basis emissions of NO <sub>x</sub> in accordance with the requirements of 40 CFR Part 75.
	In accordance with Operating Permit No. 4V04043, MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the facility shall comply with all applicable record keeping requirements contained in 40 CFR Parts 60, 72 and 75.
	In accordance with MassDEP Approval MBR-99-COM-018, record on a continuous basis emissions of NH <sub>3</sub> .
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall maintain the SOMP for the ammonia handling systems in a convenient location (e.g., control room/technical library) and make them readily available to all employees.
	In accordance with MassDEP Approval MBR-99-COM-018, record on a continuous basis temperatures at the inlets to the SCR and CO catalysts with continuous monitors equipped with alarm systems.
	In accordance with MassDEP Approval MBR-99-COM-018, record on a continuous basis emissions of CO in accordance with the requirements of 40 CFR Part 60, Appendix B and 40 CFR Part 60 Appendix F.
	In accordance with MassDEP Approval MBR-99-COM-018, record on a continuous basis emissions of VOC from continuous monitoring and recording of CO and utilization of a VOC/CO correlation curve developed from compliance testing.
	Record on a hourly basis emissions of SO <sub>2</sub> in accordance with the requirements of 40 CFR Part 75.
	Record on an hourly basis fuel flow rate and heat input in accordance with the requirements of 40 CFR Part 75, Appendix D and F. Record sulfur content, heat content, and for fuel oil, density or specific gravity, from fuel sampling/analysis performed in accordance with 40 CFR Part 75, Appendix D.
	Compliance with the Massachusetts Acid Rain Law 310 CMR 7.22 shall be demonstrated by recording quantity of each fuel burned and heating value, or heat input of each fuel burned and SO <sub>2</sub> emissions. The heat input of each fuel burned shall be calculated using the procedures in Appendix F of 40 CFR Part 75, and SO <sub>2</sub> emissions shall be monitored utilizing the fuel flow measuring and fuel sampling/analysis procedures contained in 40 CFR Part 75, Appendix D.
	Record on a continuous basis emissions of CO <sub>2</sub> derived from heat input data utilizing the procedures in 40 CFR Part 75, Appendix G.
	Record on a continuous basis opacity in accordance with the requirements of 40 CFR Part 75 and 40 CFR Part 60, Appendix B.
	Record opacity determined in accordance with EPA Test Method 9, as specified in 40 CFR Part 60, Appendix A in the event of COMS malfunction. This method shall also apply to any detached plumes.
	In accordance with 40 CFR Part 75 and MassDEP Approval MBR-99-COM-018, record operating time of each EU and the date and amount of time that any CEMS or COMS are inoperative.
	In accordance with 40 CFR Part 75 and MassDEP Approval MBR-99-COM-018, record any occurrences when visible emissions (opacity and/or smoke exclusive of uncombined water) and emission rates of NO <sub>x</sub> , NH <sub>3</sub> , CO, VOC, and SO <sub>2</sub> , as applicable, are in excess of the emission limits/standards contained in Table 3. Maintain records required by 40 CFR Part 75, Subpart F.
	Record on a continuous basis O <sub>2</sub> in the flue gas in accordance with the requirements of 40 CFR Part 75.
Maintain records in accordance with NSPS for Stationary Combustion Turbines (40 CFR Part 60, Subpart GG) for the combustion turbines and NSPS for Electric Utility Steam Generating Units (40 CFR Part 60, Subpart Da) for the supplemental duct firing HRSG burners, as applicable.	

**Table 5**

<b>EU#</b>	<b>RECORD KEEPING REQUIREMENTS</b>
EU1, EU2 (cont.)	In accordance with Operating Permit No. 4V04043, MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, maintain records on the Natural Gas consumed which contain sulfur and nitrogen content on a daily basis, or at the frequency required pursuant to any alternative fuel monitoring schedule issued for the facility, in accordance with NSPS 40 CFR Part 60, Subpart GG 60.334 and Subpart Da. Record the sulfur content of Natural Gas in accordance with the requirements of 40 CFR 60.334(h)(3)(ii), which supersedes the frequency schedule established within the Custom Monitoring Schedule issued by EPA on April 3, 2002. Such records shall contain sample analyses, sample dates, and fuel supply for inspection by representatives of MassDEP and EPA. In addition, record the nitrogen content of Natural Gas, if and when applicable.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, maintain records on the transportation diesel fuel oil consumed which contain sulfur and nitrogen content on each occasion that the Fuel Oil is transferred to the bulk storage tank, or at the frequency required pursuant to any alternative fuel monitoring schedule issued for the facility, in accordance with NSPS 40 CFR Part 60, Subpart GG 60.334 and Subpart Da. Record the sulfur content of Fuel Oil in accordance with the frequency schedule established within the Custom Monitoring Schedule issued by EPA on April 3, 2002. Such records shall contain sample analyses, sample dates, and fuel supply for inspection by representatives of MassDEP and EPA. In addition, record the nitrogen content of Fuel Oil, if and when applicable.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, maintain records of flue gas emissions, fuel consumption, water-to-fuel ratios, and turbine inlet and ambient temperatures. The continuous monitoring records for water-to-fuel ratios that shall be maintained shall be considered modified pursuant to any alternative custom fuel-monitoring schedule issued for the facility, in accordance with NSPS 40 CFR Part 60, Subpart GG 60.334 and Subpart Da.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, record and maintain emission data from each CEMS and COMS servicing the facility for at least 75% of the emission unit's operating hours per day, for at least 75% of the emission unit's operating hours per month, and for at least 95% of the emission unit's operating hours per quarter, except for periods of CEMS and COMS calibration checks, zero and span adjustments, and preventive maintenance.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, maintain a log to record problems, upsets or failures associated with the emission control systems, DAHS, CEMS, COMS, or ammonia handling system.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, a record keeping system shall be established and maintained on site by the permittee. All such records shall be maintained up-to-date such that year-to-date information is readily available for EPA New England or MassDEP's examination upon request and shall be kept on-site for a minimum of five (5) years. Record keeping shall, at a minimum, include:
	<p>a) Compliance records sufficient to demonstrate that emissions from the facility have not exceeded what this Operating Permit allows. Such records shall include, but are not limited to, fuel usage rates, emissions test results, monitoring equipment data and reports; and,</p> <p>b) Maintenance: A record of routine maintenance activities performed on the emission units control equipment and monitoring equipment including, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed; and,</p> <p>c) Malfunctions: A record of all malfunctions on the emission units control and monitoring equipment including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the equipment was returned to compliance.</p>

**Table 5**

EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2 (cont.)	In accordance with 310 CMR 7.70(8)(e)1. and MassDEP Approval No. 4B08039, comply with all recordkeeping and reporting requirements in 310 CMR 7.70(8)(e), with all applicable record keeping and reporting requirements under 40 CFR 75.73, and with the requirements of 310 CMR 7.70(2)(a)5. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(h)6.a. and MassDEP Approval No. 4B08039, comply with all output recordkeeping and reporting requirements in 310 CMR 7.70(8)(h) and with the requirements of 310 CMR 7.70(1)(e)5. and (2)(a)5. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(h)6.b. and MassDEP Approval No. 4B08039, retain data used to monitor, determine, or calculate net generation for ten years from the date reported. (State Only Requirement)
EU3	In accordance with MassDEP Approval No. MBR-99-COM-018, maintain records of the amount of Natural Gas and Fuel Oil consumed on a twelve month rolling period basis. In addition maintain records of total heat input per twelve month rolling period from all fuels combusted.
	In accordance with 310 CMR 7.19(13)(d)3. and MassDEP Approval No. MBR-99-COM-018, record on a daily basis: type fuel(s) burned, heat content of each fuel, and total heating value of fuel consumed.
	Maintain records in accordance with NSPS for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60, Subpart Dc), as applicable.
	In accordance with 310 CMR 7.04(2)(a) and Operating Permit No. 4V04043, while burning oil, the facility must record continuous operation of the smoke density sensing instrument. Such smoke density equipment shall be available for inspection at reasonable times by a representative of MassDEP, which may include the review of recording charts, which must be retained and made available for a period of one year from the date of use.
	In accordance with 310 CMR 7.04(4)(a), maintain results of fuel utilization facility inspection, maintenance, and testing and the date upon which it was performed posted conspicuously on or near the facility.
EU4	In accordance with MassDEP Approval No. MBR-99-COM-018, maintain records of the amount of fuel oil consumed on a twelve month rolling period basis.
EU5	In accordance with 310 CMR 7.18(8)(g), maintain daily records.
	In accordance with 310 CMR 7.03(6), maintain monthly records.
EU1, EU2, EU3, EU4	Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2. and Approval MBR-99-COM-018, record unit parameters, as necessary, to ensure continuous compliance with PM or PM <sub>10</sub> emission limits, as applicable.
	In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, maintain records of all periods of excess emissions, even if attributable to an emergency/malfunction, start up/shutdown or equipment cleaning, and include these emissions in the determination of the total annual emissions from EU1, EU2, EU3, and EU4 combined when determining compliance with the annual emission limits as stated in Table 3 of this Operating Permit. "Excess Emissions" are defined as emissions that are in excess of the short-term emissions as stipulated in Table 3. An exceedance of emission limits in Table 3 due to an emergency or malfunction shall not be deemed a federally permitted release as that term is used in 42 U.S.C. Section 9601(10).
	Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., maintain fuel oil analysis results used to demonstrate compliance with fuel oil sulfur content requirements.
	In accordance with MassDEP Approval No. MBR-99-COM-018, maintain on-site, at all times, a copy of the Standard Operating and Maintenance Procedure (SOMP) for the subject emission units.
Facility-Wide	In accordance with MassDEP Approval No. MBR-99-COM-018, the permittee shall institute and maintain a complaint log concerning emissions, odor, and noise from the entire facility. The permittee shall make available to the general public a telephone number that will receive and record complaints 24 hours per day, 7 days per week. The complaint log shall be maintained for the most recent five (5) year period.
	Consistent with the requirements of MassDEP Approval No. MBR-99-COM-018, maintain the test results of any other testing or testing methodology required by MassDEP.

**Table 5**

<b>EU#</b>	<b>RECORD KEEPING REQUIREMENTS</b>
Facility-Wide (cont.)	Maintain records for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.
	In accordance with 310 CMR 7.12(3)b., copies of Source Registration and other information supplied to MassDEP to comply with 310 CMR 7.12, shall be retained by the facility owner or operator for five years from the date of submittal.
	In accordance with EPA PSD Permit No. 047-119-MA08, the permittee shall make available to EPA New England for inspection, upon request, the most recent five years of records as contained in Provisos IV. 1., 2., 3., 4., and 5.
	In accordance with 310 CMR 7.00: Appendix C(10)(b), maintain records of all monitoring data and supporting information required by this Operating Permit on site for five (5) years from the date of the monitoring sample, measurement, report or initial Operating Permit Application.
	In accordance with 310 CMR 7.71(6) b. and c. retain at the facility for five years and make available to MassDEP upon request copies of the documentation of the methodology and data used to quantify emissions. (State Only Requirement)
	In accordance with 310 CMR 7.00: Appendix C(9)(b)2. and Operating Permit No. 4V04043, the facility shall maintain records on site of the fuel purchase receipts in order to demonstrate compliance with the fuel sulfur content requirement ( $\leq 0.05\%$ sulfur by weight or cleaner fuel oil).

**Table 6**

EU#	REPORTING REQUIREMENTS
EU1, EU2	<p>Report as required by 40 CFR Part 75, Subpart G.</p> <p>Report in accordance with NSPS for Stationary Combustion Turbines (40 CFR Part 60, Subpart GG) for the combustion turbines and NSPS for Electric Utility Steam Generating Units (40 CFR Part 60, Subpart Da) for the supplemental duct firing HRSG burners, as applicable.</p> <p>In accordance with the Custom Monitoring Schedule issued by EPA on April 3, 2002, notify MassDEP and EPA within 14 days of learning any non-compliance with NSPS 40 CFR Part 60, Subpart GG, such that the Custom Monitoring Schedule can be reexamined. Within 14 days of learning of any change in fuel supply or significant change in fuel quality, notify EPA such that the Custom Monitoring Schedule can be reexamined.</p> <p>In accordance with MassDEP Approval No. MBR-99-COM-018, any future changes to the QA/QC program must be submitted in writing, and reviewed and approved in writing by MassDEP prior to implementation.</p> <p>In accordance with MassDEP Approval No. MBR-99-COM-018, notify MassDEP immediately by telephone or fax and within three (3) working days, in writing, of any upset or malfunction to the ammonia handling or delivery systems at the facility. The Applicant also must comply with all notification procedures required under M.G.L. c. 21 E for any release or threat of release of ammonia.</p> <p>In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, submit a quarterly report to MassDEP and EPA New England. The report shall be submitted by the 30<sup>th</sup> of the following month after the end of each quarter and shall contain at least the following information:</p> <p>a) The facility CEMS and COMS excess emission data, in a format acceptable to MassDEP and EPA New England.</p> <p>b) For each period of all excess emissions or excursions from allowable operating conditions for the facility, the permittee shall list the duration, cause, the response taken, and the amount of excess emissions. Periods of excess emissions shall include periods of start-up, shutdown, fuel transfer, malfunction, emergency, equipment cleaning, and upsets or failures associated with the emission control system or CEMS or COMS. (“<b>Malfunction</b>” 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 that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. “<b>Emergency</b>” means any situation arising from sudden and reasonably unforeseeable events beyond the control of this 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 these things.)</p> <p>c) Each period during which there was any firing of transportation diesel fuel oil (with a sulfur content that does not exceed 0.05% by weight). The period shall include the date of oil firing, the amount of oil fired, and the reasons for and duration of firing. This report shall summarize year-to-date the number of hours of transportation diesel fuel oil use and the total amount of transportation diesel fuel oil burned.</p> <p>d) A tabulation of periods of operation (dispatch) of the subject facility.</p> <p>In accordance with Operating Permit No. 4V04043, MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the facility shall comply with all applicable reporting requirements contained in 40 CFR Parts 60, 72 and 75.</p> <p>NO<sub>x</sub> emissions data should be reported directly to EPA's National Computer Center mainframe computer in a method acceptable to EPA. The deadline to submit data to EPA is 30 days after the end of each calendar quarter.</p>



**Table 6**

EU#	REPORTING REQUIREMENTS
EU1, EU2 (cont.)	Notification of QA testing is required for Relative Accuracy Test Audits (RATAs) and Appendix E/LME (Low Mass Emission) unit tests. Notification must be made at least 21 days prior to the scheduled test date to EPA as required by 40 CFR 75.61, to MassDEP, Wall Experiment Station, 37 Shattuck Street, Lawrence, MA 01843-1398 Attn: Source Monitoring Section, and to the MassDEP Regional office, Attn: BWP Permit Chief. If tests must be rescheduled, 24 hours notice must be given, as specified in 40 CFR 75.61(a)(5).
	A previously approved RATA protocol may be referenced at the time of test notification provided that the referenced protocol was completed in accordance with current 40 CFR Part 75 procedures, addresses all previous MassDEP protocol comments to the satisfaction of MassDEP, and none of the information has changed. If a revised protocol must be submitted, it must be submitted at least 21 days prior to the scheduled test date.
	A hardcopy of the QA RATA or Appendix E/LME test results must be submitted to both the MassDEP Lawrence and MassDEP Regional offices within 45 days of completion of tests. The electronic results must be submitted in the quarterly electronic data report (EDR).
	Results from QA daily calibrations, quarterly linearity checks, and Appendix D Fuel Flow Meter tests must be reported electronically in the EDR submittal for the quarter in which the testing occurs.
	In accordance with 310 CMR 7.70(2)(a)5. and MassDEP Approval No. 4B08039, each submission under the CO <sub>2</sub> Budget Trading Program shall be submitted, signed, and certified by the CO <sub>2</sub> authorized account representative. (State Only Requirement)
	In accordance with 310 CMR 7.70(4)(a) and MassDEP Approval No. 4B08039, for each control period in which a CO <sub>2</sub> budget source is subject to the CO <sub>2</sub> requirements of 310 CMR 7.70(1)(e)3., submit to the Department by the March 1 following the relevant control period, a compliance certification report to <b>Patricio Silva at the MassDEP Boston office</b> . The compliance certification shall contain, at a minimum, the items listed in 310 CMR 7.70(4)(a)2. and 3. (State Only Requirement)
	In accordance with 310 CMR 7.70(6)(c) and MassDEP Approval No. 4B08039, following the establishment of a CO <sub>2</sub> Allowance Tracking System account, all submissions to the Department or its agent pertaining to the account, shall be made only by the CO <sub>2</sub> authorized account representative for the account. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(d) and MassDEP Approval No. 4B08039, the CO <sub>2</sub> authorized account representative shall submit written notifications to the Department and the Administrator in accordance with 40 CFR 75.61. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(e)1. and MassDEP Approval No. 4B08039, comply with all recordkeeping and reporting requirements in 310 CMR 7.70(8)(e), the applicable record keeping and reporting requirements under 40 CFR 75.73 and with the requirements of 310 CMR 7.70(2)(a)5. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(e)4.a.i. and MassDEP Approval No. 4B08039, report the CO <sub>2</sub> mass emissions data for the CO <sub>2</sub> budget unit that commenced commercial operation before July 1, 2008, in an electronic format prescribed by the Administrator, unless otherwise prescribed by the Department, for each calendar quarter beginning with the calendar quarter covering January 1, 2009 through March 31, 2009. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(e)4.c. and MassDEP Approval No. 4B08039, submit to the Department or its agent a compliance certification in support of each quarterly report. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(h)6.a. and MassDEP Approval No. 4B08039, comply with all output recordkeeping and reporting requirements in 310 CMR 7.70(8)(h) and with the requirements of 310 CMR 7.70(1)(e)5. and (2)(a)5. (State Only Requirement)
	In accordance with 310 CMR 7.70(8)(h)6.c. and MassDEP Approval No. 4B08039, submit annual output reports in a spreadsheet both electronically and in hardcopy by March 1 for the immediately preceding calendar year to <b>Patricio Silva at the MassDEP Boston office</b> or the Department's agent. (State Only Requirement)

**Table 6**

EU#	REPORTING REQUIREMENTS
EU3	Report in accordance with NSPS for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60, Subpart Dc), as applicable.
Facility Wide	<p>If and when MassDEP requests Emissions Compliance Testing (Stack Testing) to be conducted as per MassDEP Approval MBR-99-COM-018:</p> <p>(a) submit a pretest protocol for the required Emissions Compliance Test (stack test) for review and written MassDEP approval at least 90 days prior to the anticipated date of testing,</p> <p>(b) include in the pretest protocol a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required Emissions Compliance Testing, and</p> <p>(c) submit the Emissions Compliance Testing report for the review and written MassDEP approval within 60 days of the completion of the Emissions Compliance Testing.</p> <p>In accordance with MassDEP Approval MBR-99-COM-018, submit the test results of any other testing or testing methodology required by MassDEP.</p> <p>In accordance with MassDEP Approval MBR-99-COM-018, the permittee shall make available to the general public a telephone number that will receive and record complaints 24 hours per day, 7 days per week. The complaint log shall be made available to the public or MassDEP upon request.</p> <p>In accordance with MassDEP Approval MBR-99-COM-018, updated versions of the Standard Operating and Maintenance Procedures (SOMP) shall be submitted to MassDEP no later than 30 days prior to the occurrence of a significant change. MassDEP must approve of significant changes to the SOMP prior to the change becoming effective. The updated SOMP shall supersede prior versions of the SOMP.</p> <p>Submit a Source Registration/Emission Statement Form to MassDEP on an annual basis as required by 310 CMR 7.12.</p> <p>Upon MassDEP's request, any record relative to the Operating Permit or to the emissions of any air contaminant from the facility shall be submitted to MassDEP within 30 days of the request by MassDEP or within a longer time period if approved in writing by MassDEP, and shall be transmitted on paper, on computer disk, or electronically at the discretion of MassDEP, pursuant to 310 CMR 7.00: Appendix C(10)(a).</p> <p>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).</p> <p>Submit Annual Compliance report to MassDEP and EPA by January 30 of each year and as required by General Condition 10 of this Permit.</p> <p>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. This report shall include the deviation itself, including those attributable to upset conditions as defined in the permit, the probable cause of the deviation, and any corrective actions or preventive measures taken. (See General Condition No. 25)</p> <p>All required reports must be certified by a responsible official as provided in 310 CMR 7.00: Appendix C(10)(h).</p> <p>In accordance with 310 CMR 7.71(5), by April 15<sup>th</sup>, 2010 and April 15<sup>th</sup> of each year thereafter report emissions of greenhouse gases from stationary emissions sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions; and owned or leased motor vehicles when stationary source greenhouse gas emissions are greater than 5,000 short tons CO<sub>2</sub>e. Report greenhouse gas emissions electronically in a format that can be accommodated by the registry. (State Only Requirement)</p> <p>In accordance with 310 CMR 7.71(6), certify greenhouse gas emissions reports using a form provided by MassDEP or the registry. (State Only Requirement)</p> <p>In accordance with 310 CMR 7.71(7), by December 31<sup>st</sup> of the applicable year submit to MassDEP documentation of triennial verification of the greenhouse gas emissions report. (State Only Requirement)</p>

**Table 6**

<b>EU#</b>	<b>REPORTING REQUIREMENTS</b>
Facility Wide (cont.)	<p>All notifications and reporting required by EPA PSD Permit No. 047-119-MA08 shall be made to the attention of:</p> <p style="text-align: center;">Air Quality Compliance Clerk            EPA New England            5 Post Office Square - Suite 100            Boston, MA 02109-3912            ATTN: MA PSD Program</p> <hr/> <p>All Fore River's notification and reporting requirements contained herein and in accordance with Section No. 25 of this Operating Permit, shall be sent directly to:</p> <p style="text-align: center;">Department of Environmental Protection            Bureau of Waste Prevention            Southeast Regional Office            20 Riverside Drive            Lakeville, MA 02347</p> <p style="text-align: center;">ATTN: Permit Section, Chief</p> <p style="text-align: center;">Telephone: (508) 946-2770            Faxes: (508) 947-6557            (508) 946-2865</p>

**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:

<b>Table 7</b>	
<b>REGULATION</b>	<b>DESCRIPTION</b>
310 CMR 7.16	Reduction of Single Occupant Commuter Vehicle Use
310 CMR 7.27	Superseded by 310 CMR 7.28 and 7.32
310 CMR 7.28	As of January 1, 2009, this regulation is no longer applicable; it was superseded by 310 CMR 7.32.
42 U.S.C. 7401, §112(r)	Prevention of Accidental Releases
40 CFR Part 64	Compliance Assurance Monitoring

**5. SPECIAL TERMS AND CONDITIONS**

The permittee is subject to the following special provisions that are not contained in Tables 3, 4, 5 and 6:

- a) Per data as supplied through the permittee 's Operating Permit Application (Application No. 4V04043 / Transmittal No. W049142), EU1, EU2, EU3, and EU4 shall continue to emit products of combustion through stacks with the following parameters:

<b>EMISSION UNIT</b>	<b>STACK HEIGHT (Feet)</b>	<b>STACK EXIT DIAMETER (Feet)</b>	<b>STACK MATERIAL</b>
EU1, EU2	255 (Each Flue)	20.5 (Each Flue)	Steel Flues
EU3	255	4.0	Steel Flue
(1 Stack, houses 3 above Flues)	NA	NA	Concrete Stack
EU4	73.75	1.33	Steel

- b) As stated within Approval MBR-99-COM-018, the facility shall be operated in a manner to prevent the occurrence of dust or odor conditions that cause or contribute to a condition of air pollution as defined in 310 CMR 7.09. Should any nuisance condition(s) occur as a result of the operation of the facility, then appropriate steps shall immediately be taken to abate said nuisance condition(s). (State Only Requirement, 310 CMR 7.01(1))

- c) Federal Acid Rain Program, Phase II Acid Rain Permit:

EU1 and EU2 are subject to the requirements of Phase II of the Federal Acid Rain Program as defined by EPA in 40 CFR Part 72. 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. MassDEP issued the initial Phase II Acid Rain Permit for Fore River

on September 1, 2002. The Phase II Acid Rain Permit Renewal (Application No. 4B08027), will be issued with this initial Operating Permit No. 4V04043. MassDEP 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.

Within 60 days of the end of each calendar year, the facility shall hold in its SO<sub>2</sub> allowance account at least one allowance for each ton of SO<sub>2</sub> emitted during the previous year. An allowance is a limited authorization to emit SO<sub>2</sub> in accordance with the Acid Rain Program.

If the facility has excess emissions in any calendar year, it shall submit a proposed offset plan as required under 40 CFR Part 77. In addition, the permittee shall pay any penalties specified in 40 CFR Part 77 and comply with the terms of an approved offset plan.

In accordance with 40 CFR Part 73, the permittee's designated representative may buy, sell, trade, or transfer allowances between EU accounts at any time, except between 60 days of the end of the calendar year and the completion of the annual SO<sub>2</sub> allowance reconciliation for the preceding year(s).

The yearly allowance allocations as identified in 40 CFR Part 73, Tables 2, 3, or 4 (as amended) are identified below:

EMISSION UNIT	YEARS
	2010 to 2014
EU1	0
EU2	0

d) Noise (State Only Requirement)

In accordance with MassDEP Approval No. MBR-99-COM-018, Section IX. and Operating Permit No. 4V04043, the permittee shall take necessary precautions to insure that the facility complies with MassDEP's noise guidelines and that the facility does not cause a condition of air pollution (noise) as provided for in 310 CMR 7.01, which unreasonably interferes with the comfortable enjoyment of life and property or conduct of business. Sources of noise include, but are not limited to: transformers, the air-cooled condensers, the heat recovery steam generators, steam turbines, electric generators, the combustion turbines, the combustion turbine air inlets, main exhaust stacks, the high pressure and auxiliary boiler feedwater pumps, plant and instrument air compressors, auxiliary boiler, vents that would or may be activated during start-up and shutdown, natural gas compressor equipment, metering equipment, glycol coolers, and building ventilation systems.

MassDEP's Noise Policy 90-001 limits increases over the existing L<sub>90</sub> ambient background level to 10 decibels, A-weighted (dBA). The L<sub>90</sub> level represents the sound level exceeded 90 percent of the time and is used by MassDEP for the regulation of noise emissions. Additionally, "pure tone" sounds, defined as any octave band level which exceeds the levels in adjacent octave bands by 3 dBA or more, are also prohibited. The permittee, at a minimum, shall ensure that the proposed facility complies with said Policy and that no sound

emissions resulting in noise shall occur as provided in 310 CMR 7.10.

The permittee shall not allow noise levels generated from the operation of the facility to exceed 10 decibels, A-weighted (dBA) above the existing ambient background level at any time. Further, based on the noise frequency distribution, no combination of noise sources shall result in a "pure tone condition," as previously defined. A noise survey was conducted in accordance with MassDEP procedures/guidelines to verify compliance with the allowable noise impacts specified in the table below. The noise survey was conducted at the Fore River site on June 24-25, 2004 and July 15-16, 2004. Additional noise measurements were conducted at the Fore River site at locations R-1, R-2 and R-7 on September 14, 2005.

<b>Allowable Noise Impacts +</b>			
<b>LOCATION</b>	<b>AMBIENT (L<sub>90</sub>,dBA)<sup>(1)</sup></b>	<b>AMBIENT &amp; PLANT (L<sub>90</sub>,dBA)</b>	<b>CHANGE (dBA)<sup>(2)</sup></b>
R-1 Monatiquot Street	41	47	+6
R-2 Idlewell	43	43	0
R-3 East Braintree	44	44	0
R-4 Quincy, W	45	45	0
R-5 Quincy Point	43	46	+3
R-6 Germantown	50	50	0
R-7 East Property Fence Line	41	48	+7

+ **Notes:**

- 1 The lowest background levels observed during either nighttime or daytime where the noise level is exceeded 90 percent of the time (L<sub>90</sub>) which is the level regulated by the MassDEP Noise Policy.
- 2 The MassDEP Noise Policy limits new noise increases to no more than 10 dBA over the L<sub>90</sub> ambient levels. Tonal sounds, defined as any octave band level, which exceeds the levels in adjacent octave bands by 3 dBA or more, are not allowed.

Upon receiving information that the facility may be in noncompliance regarding sound emission levels, the permittee shall take the following immediate actions:

- 1 Notify the Bureau of Waste Prevention, SERO, Compliance and Enforcement Section, by telephone or fax;
- 2 Verify whether noncompliance occurred and is continuing; and
- 3 Take all reasonable interim steps to eliminate or minimize sound emissions to return to compliance.

Should noncompliance, due to sound emissions from the facility that occur despite the interim steps implemented above, the permittee shall, unless otherwise ordered by MassDEP, submit within 30 days of receipt of information of noncompliance from

MassDEP or other credible source, whichever is earlier, a sound reduction plan which sets out:

- 1 the additional monitoring and remedial actions it proposes to implement in order to verify a return to compliance; and
  - 2 a schedule for the commencement and completion of each major component of the monitoring and remedial actions.
- e) Massachusetts Clean Air Interstate Rule (CAIR), 310 CMR 7.32

EU1 and EU2 are subject to the requirements of CAIR, 310 CMR 7.32.

In accordance with 310 CMR 7.32(5)(c)3.b.xi., for control periods 2009 through 2011, the existing CAIR NOx Ozone Season sources will receive allocations based on the procedures in 310 CMR 7.32(5)(c)3.b.i. through ix., but using output data for 2004 through 2006. Allocations for each control period are listed in 310 CMR 7.32(5)(c)3.: *Table A*. Beginning with the allocation for control period 2012, the existing CAIR NOx Ozone Season sources in Table 1 will be allocated CAIR NOx Ozone Season allowances according to the procedures in 310 CMR 7.32(5)(c)3.b.i. through x.

<b>7.32(5)(c)3.: TABLE A</b>		
<b>Annual CAIR NOx Ozone Season Allowance Allocations for 2009 - 2011</b>		
<b>NAME</b>	<b>ORIS</b>	<b>OZONE SEASON ALLOWANCES</b>
Fore River	55317	552

- f) In accordance with MassDEP Approval No. MBR -99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall ensure that the SCR control equipment for each turbine generator EU1 and EU2 is operational whenever the turbine exhaust temperature attains 558 °F during natural gas firing and 608 °F during fuel oil firing, measured at the SCR unit. These temperature points correspond approximately to 50% combustion turbine power during natural gas and fuel oil firing, respectively.
- g) In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall maintain in the facility control room, properly maintained, operable, portable ammonia detectors for use during an ammonia spill, or other emergency situation involving ammonia at the facility.
- h) In accordance with MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall maintain an adequate supply of spare parts on-site to maintain the on-line availability and data capture requirements for the CEMS and COMS equipment servicing the facility.
- i) In accordance with Approval MBR-99-COM-018, the permittee shall maintain a complaint log concerning emissions, odor, and noise from the subject facility. The permittee shall

make available to the general public a telephone number, which will receive and record complaints 24 hours per day, 7 days per week. The complaint log shall be maintained for the most recent five (5) year period. The complaint log shall be made available to the public or MassDEP upon request. The Applicant shall take all reasonable actions to respond to said complaints.

- j) In accordance with MassDEP Approval No. MBR -99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall properly train all personnel to operate the facility and control equipment in accordance with vendor specifications. All persons responsible for the operation of the ammonia handling and SCR control systems shall sign a statement, which shall be maintained on site and made available to MassDEP and EPA New England personnel upon request, affirming that they have read and understand the approved Standard Operating and Maintenance Procedures (SOMP). The permittee shall give refresher training to facility personnel at least once annually.
- k) In accordance with MassDEP Approval No. MBR -99-COM-018 and EPA PSD Permit No. 047-119-MA08, when the facility commences fuel oil-firing:
  - 1. Start-up and shutdown limits on oil firing shall be proposed and established from the compliance testing and normal operations of EU1 and EU2. Note that for EU1 and EU2 while firing fuel oil, start-up and shutdown compliance testing was conducted on January 5 & 8, 2007. MassDEP received Fore River's Stack Tests FINAL REPORT on March 13, 2007. Start-up and shutdown proposed limits on oil firing will be reviewed via a forthcoming MassDEP Comprehensive Plan Approval (CPA) application from Fore River.
  - 2. The permittee shall examine and propose, as part of the final emissions test results report for distillate oil, a surrogate methodology or parametric monitoring for PM based on initial compliance test results.
- l) In accordance with Approval MBR-99-COM-018, MassDEP shall incorporate the maximum allowable emission rate limits (lb/hr, lb/MMBTU, ppmvd) for NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, PM/PM<sub>10</sub> and NH<sub>3</sub>, including Opacity limits, for "hot start", "warm start", "cold start", and shut down periods for EU1 and EU2 after review of the compliance test data for these periods of time during fuel oil firing, and such limits shall be considered enforceable.
- m) The permittee is subject to, and has stated in their Operating Permit Application (Application No. 4V04043 / Transmittal No. W049142), that they are in compliance with the requirements of 40 CFR Part 82: Protection of Stratospheric Ozone. These requirements are applicable to this facility and EPA enforces these requirements.
- n) In accordance with MassDEP Approval No. MBR -99-COM-018 and EPA PSD Permit No. 047-119-MA08, if the permittee is subject to 40 CFR Part 68 due to the presence of a regulated substance above a threshold quantity in a process, it must submit a Risk Management Plan no later than the date the regulated substance is first present above a threshold quantity.
- o) In accordance with Approval MBR-99-COM-018, no person shall cause, suffer, allow, or permit the removal, alteration or shall otherwise render inoperative any air pollution



control equipment or equipment used to monitor emissions which has been installed as a requirement of 310 CMR 7.00, other than for reasonable maintenance periods or unexpected and unavoidable failure of the equipment, provided that MassDEP has been notified of such failure, or in accordance with specific written approval of the MassDEP.

- p) In accordance with MassDEP Approval No. MBR -99-COM-018 and EPA PSD Permit No. 047-119-MA08, any proposed increase in emissions above the limits contained in this Operating Permit must first be approved in writing by MassDEP pursuant to 310 CMR 7.02 and by EPA New England pursuant to 40 CFR 52.21. In addition, any emissions increase may subject the facility to additional regulatory requirements.
- q) In accordance with Operating Permit No. 4V04043, MassDEP Approval No. MBR-99-COM-018 and EPA PSD Permit No. 047-119-MA08, the permittee shall ensure that the subject facility complies with all applicable operational standards contained in 40 CFR Parts 60, 63, 72 and 75.
- r) The owner/operator of Fore River, is subject to and shall comply with the Massachusetts Clean Air Interstate Rule (CAIR), 310 CMR 7.32 and has submitted a CAIR emission control application (Application No. 4B07043 / Transmittal No. W153612), pursuant to 310 CMR 7.32(3).
- s) EU4 and EU6 are existing engines that are subject to the requirements of US EPA's 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE). This subpart is applicable to both major HAP sources and area HAP sources. Fore River is an area HAP source, which is a stationary source that emits or has the potential to emit any single HAP at a rate of less than 10 tons per year or any combination of HAPs at a rate of less than 25 tons per year. The facility will comply by the first substantive compliance date on May 3, 2013.

EU4 and EU6 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]. Compliance with all applicable provisions therein is required.

- t) If total deliveries to Fore River of 0.05% sulfur by weight distillate fuel oil equals or exceeds 12,500,000 gallons in the preceding 12-month period, the permittee shall burn no more than 29,074,350 gallons of 0.05% sulfur content, by weight, transportation distillate fuel oil per twelve-month rolling total in the CTGs. The maximum air emissions for PSD regulated pollutants (NO<sub>x</sub>, CO, SO<sub>2</sub>, PM, NH<sub>3</sub>) generated from the combustion of the total of 29,074,350 gallons of transportation distillate fuel oil (0.05% sulfur by weight) in the two combustion turbines are incorporated into Table 3.

If total deliveries to Fore River of 0.05 percent sulfur by weight distillate fuel oil is less than 12,500,000 gallons in the preceding 12-month period and the sulfur content of all other delivered distillate fuel oil is 0.003% by weight or less (e.g. ultra low sulfur distillate fuel oil), the permittee may burn any amount of transportation distillate fuel oil (0.05% sulfur by weight) or cleaner fuel in the two combustion turbines, as long as actual emissions when burning distillate fuel oil do not exceed the tonnage numbers listed in Table 3 on a twelve-month rolling basis. The permittee shall determine the total tonnage of actual

emissions when burning distillate fuel oil using the following formulas listed below:

The actual number of hours (“n”) when distillate fuel oil is fired over any consecutive twelve-month period shall satisfy each formula listed below. Parameters in these formulas are as follows:

$Q_{ixxNO_x}$  or  $Q_{ixxCO}$  or  $Q_{ixxNH_3}$  or  $Q_{ixxSO_2}$  = Pounds of emissions (of  $NO_x$ , CO,  $NH_3$  or  $SO_2$ ) emitted by turbine xx (11 or 12) in hour “i”. These are based on measurements by the Continuous Emission Monitoring System (CEMS)/Data Acquisition and Handling System (DAHS).

$F_{ixx}$  = MMBtu of oil fired by turbine xx (11 or 12) in hour “i”. This is based on oil flow monitoring and calculations in the DAHS.

$E_{ixxPM}$  or  $E_{ixxVOC}$  = PM or VOC emission rate for turbine xx (11 or 12) in lb/MMBTU based on maximum emission rate determined to be achievable during emission compliance stack testing on oil for turbine xx.

Formulas that must be satisfied for Each Pollutant for Each Consecutive 12-Month Period:

$$\sum_{i=1}^n Qi11NO_x + \sum_{i=1}^n Qi12NO_x \leq 100,000 \text{ lbs of } NO_x$$

$$\sum_{i=1}^n Qi11CO + \sum_{i=1}^n Qi12CO \leq 192,000 \text{ lbs of } CO$$

$$\sum_{i=1}^n Qi11NH_3 + \sum_{i=1}^n Qi12NH_3 \leq 12,000 \text{ lbs of } NH_3$$

$$\sum_{i=1}^n Qi11SO_2 + \sum_{i=1}^n Qi12SO_2 \leq 206,000 \text{ lbs of } SO_2$$

$$\sum_{i=1}^n (Fi11)(Ei11PM) + \sum_{i=1}^n (Fi12)(Ei12PM) \leq 200,000 \text{ lbs of } PM$$

$$\sum_{i=1}^n (Fi11)(Ei11VOC) + \sum_{i=1}^n (Fi12)(Ei12VOC) \leq 44,000 \text{ lbs of } VOC$$

**Presented below are detailed calculations that will be performed by CEMS/DAHS to calculate the Q values (lb/hr) defined above for  $NO_x$ , CO,  $NH_3$  and  $SO_2$ , as well as the F value (MMBTU/hr). These will be based on inputs from measurement devices and user defined inputs. These calculations will be performed individually for Units 11 and 12.**

**Inputs from measurement devices:**

$C_{iNO_x}$  or  $C_{iCO}$  or  $C_{iNH_3}$  = parts per million by volume dry basis (ppmvd) as measured in the stack and averaged on an hourly basis.

$O_{2i}$  = Percent oxygen (dry basis) as measured in the stack and averaged on an hourly basis.

$G_i$  = Gallons per hour of oil being combusted and averaged on an hourly basis.

**Input values updated by user:**

GCV = Gross Calorific Value for oil (Btu/pound)

D = Density of oil (pounds/gallon)

S = Percent sulfur by weight in the oil (based on fuel analyses for each tank of oil).

**Constants:**

K = Conversion factor from ppmvd to lb/dry standard cubic feet (dscf) which is 1.194 E-07 for  $NO_x$ , 7.27 E-08 for CO, and 4.41 E-08 for  $NH_3$ .

9190 = "F-Factor" for oil (dscf/MMBTU) per 40 CFR 60, Appendix A, Method 19.

**Calculations:**

1. Hourly emission rate  $E_i$  (lb/MMBTU) for  $NO_x$ , CO,  $NH_3$  for each turbine. This is from Equation 19-1 from 40 CFR 60, Appendix A, Method 19:

$$E_i = K C_i (9190) (20.9 / (20.9 - O_{2i}))$$

2. Hourly oil firing rate  $F_i$  (MMBTU/hr) for each turbine:

$$F_i = [G_i (GCV) D] / 1,000,000$$

3. Hourly emission rate  $Q_i$  (lb/hr) for  $NO_x$ , CO,  $NH_3$  for each turbine:

$$Q_i = E_i F_i$$

4. Hourly emission rate  $Q_i$  (lb/hr) for  $SO_2$  for each turbine:

$$Q_i = G_i D (2.0 \text{ lb } SO_2 / \text{lb } S) (S / 100)$$

- u) The permittee shall not burn transportation distillate fuel oil or cleaner fuel oil in the CTGs and the auxiliary boiler during the time period May 1 through September 30 inclusive of

any calendar year, except during initial compliance testing, initial plant demonstration, performance testing, periodic readiness testing, in the event of the unavailability of natural gas, or in the case of a variance obtained from MassDEP to operate during an emergency. Any oil combusted during these periods of exception shall be included in the permittee's total allowed oil allotment.

- v) Total facility emission limits are for the combined operation of EU1, EU2, EU3, and EU4.

Emissions for the combustion turbines (EU1 and EU2) are based upon 8,040 hours of natural gas firing at 100% duct-fired load at an annual average inlet temperature of 51°F ambient, 720 full load equivalent hours of transportation distillate fuel oil firing at 100% duct-fired load at an inlet temperature of -12°F ambient, and includes combustion turbine start-up emissions.

Total emissions for the auxiliary boiler (EU3) are based on 132,000 MMBTU of fuel per year restriction. The auxiliary boiler shall be restricted to a total fuel consumption of 132 million cubic feet of natural gas (based on a heat input of 1,000 BTU per cubic foot) or 177,778 gallons of transportation distillate fuel oil with a sulfur content that does not exceed 0.05 percent by weight or cleaner fuel oil (based on a heat input of 135,000 BTU per gallon of fuel oil). In addition, EU3 shall be restricted to 24,000 MMBTU of fuel oil. The combined consumption of natural gas and fuel oil shall not exceed the total of 132,000 MMBtu per 12-month rolling period.

Emissions for the emergency diesel generator (EU4) are based on firing 17,111 gallons per 12-month rolling period. This is based upon 150 hours of operation per unit while firing transportation diesel fuel oil having a sulfur content that does not exceed 0.05% by weight or cleaner fuel oil, inclusive of periodic readiness testing and emergency use.

The subject facility emissions are equal to the total combustion turbine emissions due to the fact that neither the auxiliary boiler nor emergency diesel generator will operate concurrently with combustion turbine operation. The auxiliary boiler shall not operate except during start-up and only in the event that no other combustion turbine is in operation or if steam is not available from some other on-site steam source, and also for periodic readiness testing. The emergency diesel generator will only operate as required to shutdown Units 11 and 12 and only in the event that power to achieve shutdown is not available from the electric power grid; and for periodic readiness testing.

- w) In accordance with EPA Permit No. 047-119-MA08, for EU3, the monthly fuel limit (total of gas and/or distillate oil consumed in any month) shall be 15,600 MMBtu per month.

## **6. ALTERNATIVE OPERATING SCENARIOS**

The permittee did not request alternative operating scenarios in its operating permit application.

## **7. EMISSIONS TRADING**

### **(a) Intra-facility emission trading**

The permittee is currently authorized to engage in emissions trading under the following federal and state regulatory programs:

40 CFR Parts 72, 73, and 74 - SO<sub>2</sub> Allowance System;  
310 CMR 7.22 - SO<sub>2</sub> Emissions Reductions for the Purpose of Reducing Acid Rain;  
310 CMR 7.70 – Massachusetts CO<sub>2</sub> Budget Trading Program (State Only);  
310 CMR 7.00, Appendix A - Emission Offsets; and  
310 CMR 7.00, Appendix B - Emission Reduction Credits.

Pursuant to 310 CMR 7.00: Appendix C(7)(b), emission trades, provided for in this permit, may be implemented provided the permittee notifies The United States Environmental Protection Agency (EPA) and the Department at least fifteen (15) days in advance of the proposed changes and the permittee provides the information required in 310 CMR 7.00: Appendix C(7)(b)3.

Any intra-facility change that does not qualify pursuant to 310 CMR 7.00: Appendix C(7)(b)2 is required to be submitted to the Department pursuant to 310 CMR 7.00: Appendix B.

### **(b) Inter-facility emission trading**

The permittee is currently authorized to engage in emissions trading under the following federal and state regulatory programs:

40 CFR Parts 72, 73, and 74 - SO<sub>2</sub> Allowance System;  
310 CMR 7.22 - SO<sub>2</sub> Emissions Reductions for the Purpose of Reducing Acid Rain;  
310 CMR 7.70 – Massachusetts CO<sub>2</sub> Budget Trading Program (State Only);  
310 CMR 7.00, Appendix A - Emission Offsets; and  
310 CMR 7.00, Appendix B - Emission Reduction Credits.

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. COMPLIANCE SCHEDULE**

- a) 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 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 MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

#### (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 permit. The report shall be postmarked or delivered by January 30 to MassDEP and to the Regional Administrator, 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:

- i. the terms and conditions of the permit that are the basis of the certification;
- ii. the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- iv. 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:

- i. the terms and conditions of the permit that are the basis of the certification;
- ii. the current compliance status during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- iv. whether there were any deviations during the reporting period;
- v. if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- vi. whether deviations in the reporting period were previously reported;
- vii. if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- viii. if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- ix. any additional information required by 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 Department 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) 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:
  - i. the liability of the source for any violation of applicable requirements prior to or at the time of permit issuance.
  - ii. the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C.



- iii. §7401, §408(a); or  
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), 7.21, 7.22, 7.70 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 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 MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by MassDEP on the renewal application.

In the event 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 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 MassDEP and/or EPA. The responsible official of the facility may request that MassDEP terminate the facility's operating permit for cause. 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. DUTY TO PROVIDE INFORMATION**

Upon 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 MassDEP copies of records that the permittee is required to retain by this permit.

## **18. DUTY TO SUPPLEMENT**

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 MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to 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 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 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 permit, including any amendments or attachments thereto, upon request by 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. EMERGENCY CONDITIONS**

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;
- (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 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.

<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>2</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, 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.

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 supercede the following deviation reporting requirements, if applicable.

The permittee shall report to MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone, fax or electronic mail (e-mail), within three (3) days of discovery of such deviation:

- 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.
- Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the permit or approval as surrogate for an emission limit.
- Exceedances of permit operational limitations directly correlated to excess emissions.
- Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- Failure to perform QA/QC measures as required by your 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 Waste Prevention Air Operating Permit Reporting Kit, which is available to the permittee via MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

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 Waste Prevention 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 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. LEGEND OF ABBREVIATED TERMS IN OPERATING PERMIT**

\*Not all abbreviations are present in every Operating Permit

< - Less Than  
> - Greater Than  
#/hr - Pounds Per Hour  
10<sup>6</sup> BTU/hr - 1,000,000 BTU Per Hour  
AOS – Alternative Operating Scenario  
AQCR - Air Quality Control Region  
CEM - Continuous Emission Monitor  
CO - Carbon Monoxide  
EPA - Environmental Protection Agency  
FMF FAC. NO. - Facility Master File Number  
FMF RO NO. - Facility Master File Regulated Object Number  
FT<sup>3</sup>/day - Cubic Feet Per Day  
HHV - Higher Heating Value  
ISO - Represent 59°F, 60% Relative Humidity, 29.92 Inches Mercury At Sea Level  
MassDEP - Massachusetts Department of Environmental Protection  
MMBTU/hr - Million British Thermal Units Per Hour  
NH<sub>3</sub> - Ammonia  
NO<sub>x</sub> - Nitrogen Oxides  
PB - Lead  
PLT ID - Plant Identification  
PM - Particulate Matter  
PPM - Parts Per Million  
PTE - Potential To Emit  
SO<sub>2</sub> - Sulfur Dioxide  
TPY - Tons Per Year  
VOC - Volatile Organic Compound

## **APPEAL CONDITIONS FOR OPERATING PERMIT**

This permit is an action of 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 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.

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.