Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
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FINAL AIR QUALITY OPERATING PERMIT

(Administrative Amendment to MBR-95-OPP-036A, Transmittal X235946)

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"]:

Constellation Mystic Power, LLC
173 Alford Street
Charlestown, Massachusetts 02129

INFORMATION RELIED UPON:

Application MBR-95-OPP-036A2
Transmittal X238907

FACILITY LOCATION:

Mystic Station
173 Alford Street
Charlestown/Everett, MA

FACILITY IDENTIFYING NUMBERS:

SSEIS ID: 1190128
FMF FAC NO. 306586
FMF RO NO. 306587

NATURE OF BUSINESS:

Electrical Power Generation

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM:

(NAICS): 221112

RESPONSIBLE OFFICIAL:

Name: Archie Gleason
Title: General Manager

FACILITY CONTACT PERSON:

Name: Gary Basilesco
Title: Environmental Manager
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This Operating Permit expired on December 16, 2009. However, MassDEP received Mystic Station's Operating Permit Renewal Application (Application MBR-95-OPP-036R, Transmittal X228624) on June 17, 2009, therefore, Mystic Station may continue to operate under its Application Shield in accordance with 310 CMR 7.00: Appendix C(11) until MassDEP takes final action on the Application.

For MassDEP, Bureau of Waste Prevention

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

James E. Belsky
Regional Permit Chief

August 10, 2011
Date

TABLE OF CONTENTS

SPECIAL CONDITIONS FOR OPERATING PERMIT

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00: Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt and insignificant activities as described in 310 CMR 7.00: Appendix C(5)(h) and (i). The 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.

2. EMISSION UNIT IDENTIFICATION

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

Table 1

EU#	DESCRIPTION OF EMISSION UNIT	EU DESIGN CAPACITY	POLLUTION CONTROL DEVICE (PCD)
EU1	Combustion Engineering High Pressure Boiler #4	1,420 MMBTU per hour	None
EU2	Combustion Engineering High Pressure Boiler #5	1,420 MMBTU per hour	None
EU3	Combustion Engineering High Pressure Boiler #6	1,510 MMBTU per hour	None
EU4	Combustion Engineering High Pressure Boiler #7	5,505 MMBTU per hour	Electrostatic Precipitator (PCD1)
EU5	Mitsubishi Heavy Industries 501G Combustion Turbine/Heat Recovery Steam Generator #81 (Combined Cycle)	2,955 MMBTU per hour	Dry Low NOx Combustors (PCD2) Selective Catalytic Reduction (PCD3) CO Oxidation Catalyst (PCD4)
EU6	Mitsubishi Heavy Industries 501G Combustion Turbine/Heat Recovery Steam Generator #82 (Combined Cycle)	2,955 MMBTU per hour	Dry Low NOx Combustors (PCD5) Selective Catalytic Reduction (PCD6) CO Oxidation Catalyst (PCD7)
EU7	Mitsubishi Heavy Industries 501G Combustion Turbine/Heat Recovery Steam Generator #93 (Combined Cycle)	2,955 MMBTU per hour	Dry Low NOx Combustors (PCD8) Selective Catalytic Reduction (PCD9) CO Oxidation Catalyst (PCD10)
EU8	Mitsubishi Heavy Industries 501G Combustion Turbine/Heat Recovery Steam Generator #94 (Combined Cycle)	2,955 MMBTU per hour	Dry Low NOx Combustors (PCD11) Selective Catalytic Reduction (PCD12) CO Oxidation Catalyst (PCD13)
EU9A	Nebraska Model No. NS-E-59 Temporary Auxiliary Boiler	90.9 MMBTU per hour	Low NOx Burner (PCD14) Flue Gas Recirculation (PCD15)
EU9B	Rentech Auxiliary Boiler	163.3 MMBTU per hour	Low NOx Burner (PCD16) Flue Gas Recirculation (PCD17)
EU10	Rolls Royce Model No. Avon 1533-75L Combustion Turbine (Simple Cycle)	186 MMBTU per hour	None
EU11	Detroit Diesel Model No. T123K36 Emergency Diesel Generator	15.4 MMBTU per hour	None
EU12	Cummins Model No. VT12-800-GC Emergency Diesel Generator	4.5 MMBTU per hour	None
EU13	Safety Clean Model No. 250 Parts Washer (Degreaser)	NA	None
EU14	Safety Clean Model No. 250	NA	None

Table 1			
EU#	DESCRIPTION OF EMISSION UNIT	EU DESIGN CAPACITY	POLLUTION CONTROL DEVICE (PCD)
	Parts Washer (Degreaser)		
EU15	Safety Clean Model No. 250 Parts Washer (Degreaser)	NA	None
EU16	Safety Clean Model No. 250 Parts Washer (Degreaser)	NA	None

Table 1 Key:

EU# = Emission Unit Number
# = Number
MMBTU = million British Thermal Units
NO_x = Oxides of Nitrogen
NA = Not Applicable

3. IDENTIFICATION OF EXEMPT ACTIVITIES

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

Table 2
The list of exempt activities is contained in the Application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of this list shall be kept at the facility and a copy shall be submitted to MassDEP's Regional Office.

4. APPLICABLE REQUIREMENTS

A. EMISSION LIMITS AND RESTRICTIONS

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

Table 3

EU#	RESTRICTION	FUEL/RAW MATERIAL	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU1, EU2, EU3	Total of all Fuel Oil combusted for all EUs: (13) ≤ 21,306,123 gallons per calendar year (State Enforceable Only) ≤ 42,612,246 gallons per 12-month rolling period	No. 6 Fuel Oil ≤ 1.0% S by weight No. 2 Fuel Oil ≤ 0.3% S by weight	NO_x	≤ 0.25 lb/MMBTU (7, 15)	310 CMR 7.19(4)(a)3.a.i. MBR-94-COM-026
		All Fuel Oil	PM	≤ 0.12 lb/MMBTU	310 CMR 7.02(8)(d) MBR-85-COM-013
		All Fuel Oil	NA	NA	MBR-99-COM-012 (Fuel Restrictions)
EU4	NA	No. 6 Fuel Oil ≤ 1.0% S by weight	NO_x	≤ 0.25 lb/MMBTU (7, 15)	310 CMR 7.19(4)(a)3.a.i. MBR-94-COM-026
		Natural Gas		≤ 0.20 lb/MMBTU (7, 15)	310 CMR 7.19(4)(a)3.a.ii. MBR-94-COM-026
		Cofiring Fuels		≤ PS_{NO_x} (6, 7)	310 CMR 7.19(15)
		All Fuels	PM	≤ 0.05 lb/MMBTU	310 CMR 7.02(8)(h) MBR-85-COM-013
EU1, EU2, EU3, EU4	NA	All Fuels	CO	≤ 200 ppmvd @ 3% O_2 (7)	310 CMR 7.19(4)(f)
		No. 6 Fuel Oil ≤ 1.0% S by weight	S in Fuel	≤ 0.55 lb/MMBTU	310 CMR 7.05(1)(b)2.
EU5, EU6, EU7, EU8	Operation at ≥ 56% power or load, excluding start-ups and shutdowns (11)	Natural Gas	NO_x	≤ 21.7 lb/hr (8, 9) ≤ 0.0074 lb/MMBTU (8, 9) ≤ 2.0 ppmvd @ 15% O_2 (8,9)	MBR-99-COM-012
			CO	≤ 13.2 lb/hr (8, 9) ≤ 0.0045 lb/MMBTU (8, 9) ≤ 2.0 ppmvd @ 15% O_2 (8, 9)	
			VOC (no duct firing)	≤ 3.8 lb/hr (8, 12) ≤ 0.0013 lb/MMBTU (8, 12) ≤ 1.0 ppmvd @ 15% O_2 (8, 12)	
			VOC (duct-fired)	≤ 6.4 lb/hr (8, 12) ≤ 0.0022 lb/MMBTU (8, 12) ≤ 1.7 ppmvd @ 15% O_2 (8, 12)	
			SO_2	≤ 8.6 lb/hr (8, 9) ≤ 0.0029 lb/MMBTU (8, 9)	
			PM/PM_{10}	≤ 32.5 lb/hr (8, 9) ≤ 0.011 lb/MMBTU (8, 9)	
			NH_3	≤ 8.0 lb/hr (8, 9) ≤ 0.0027 lb/MMBTU (8, 9) ≤ 2.0 ppmvd @ 15% O_2 (8, 9)	
			NO_x	≤ 0.0075% by volume @ 15% O_2, dry basis	40 CFR Part 60, Subpart GG
			SO_2	≤ 0.015% by volume @ 15% O_2, dry basis	40 CFR Part 60, Subpart GG
			S in Fuel	≤ 0.8% by weight	40 CFR Part 60, Subpart GG
			SO_2	≤ 0.80 lb/MMBTU and ≤ 10% of potential combustion concentration (90% reduction) (**18, 20**) or 100% of potential combustion concentration (0% reduction) and ≤ 0.20 lb/MMBTU (18, 20)	40 CFR Part 60, Subpart Da
			NO_x	≤ 1.6 pounds per megawatt-hour gross energy output (**19, 20**)	40 CFR Part 60, Subpart Da
			PM	≤ 0.03 lb/MMBTU (20)	40 CFR Part 60, Subpart Da
			Opacity	< 20 percent (6 minute average), except 20 to ≤ 27 percent for ≤ 6 minutes during any one hour (20)	40 CFR Part 60, Subpart Da
EU9A	≤ 67,630,000 cubic feet of Natural Gas combusted per month	Natural Gas	NO_x	≤ 0.035 lb/MMBTU ≤ 1.4 tons per month ≤ 3.2 tons per 12-month rolling period	MBR-2000-COM-001
			PM	≤ 0.007 lb/MMBTU	
			CO	≤ 0.080 lb/MMBTU	
			VOC	≤ 0.008 lb/MMBTU	

Table 3

EU#	RESTRICTION	FUEL/RAW MATERIAL	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU9A	≤ 181,800,000 cubic feet of Natural Gas combusted per 12-month rolling period ≤ 545,400,000 cubic feet of Natural Gas combusted during the life of the unit	Natural Gas	SO_2	≤ 0.0029 lb/MMBTU	MBR-2000-COM-001
EU9B	≤ 40,825,000 cubic feet of Natural Gas combusted per 12-month rolling period ≤ 10% annual capacity factor	Natural Gas	NO_x	≤ 5.7 lb/hr (10) ≤ 0.035 lb/MMBTU (10) ≤ 30 ppmvd @ 3% O_2 (10)	MBR-03-COM-010/ MBR-99-COM-012
			CO	≤ 6.0 lb/hr (10) ≤ 0.037 lb/MMBTU (10) ≤ 50 ppmvd @ 3% O_2 (10)	
			VOC	≤ 1.3 lb/hr (10) ≤ 0.008 lb/MMBTU (10)	
			SO_2	≤ 0.5 lb/hr (10) ≤ 0.0029 lb/MMBTU (10)	
			PM/PM_{10}	≤ 1.1 lb/hr (10) ≤ 0.007 lb/MMBTU (10)	
EU5, EU6, EU7, EU8, EU9B	NA	Natural Gas	Opacity	< 5%, except 5 to < 10% for ≤ 2 minutes during any one hour	MBR-99-COM-012
			S in Fuel	≤ 0.8 grains per 100 cubic feet	
EU11	≤ 8,250 gallons of Fuel Oil combusted per 12-month rolling period	No. 2 Fuel Oil ≤ 0.05% S by weight	NO_x	≤ 37.44 lb/hr (10) ≤ 6.55 gm/bhp-hr (10)	
			CO	≤ 3.05 lb/hr (10) ≤ 0.53 gm/bhp-hr (10)	
			VOC	≤ 1.16 lb/hr (10) ≤ 0.20 gm/bhp-hr (10)	
			SO_2	≤ 0.95 lb/hr (10) ≤ 0.17 gm/bhp-hr (10)	
			PM/PM_{10}	≤ 0.87 lb/hr (10) ≤ 0.15 gm/bhp-hr (10)	
			S in Fuel	≤ 0.05% by weight	
			Opacity	< 10%, except 10 to < 15% for ≤ 2 minutes during any one hour	
EU5, EU6, EU7, EU8, EU9B, EU11	NA	All Fuels	NO_x	≤ 395 tons per 12-month rolling period (14)	
			CO	≤ 530 tons per 12-month rolling period (14)	
			VOC	≤ 104 tons per 12-month rolling period (14)	
			SO_2	≤ 138 tons per 12-month rolling period (14)	
			PM/PM_{10}	≤ 524 tons per 12-month rolling period (14)	
			NH_3	≤ 129 tons per 12-month rolling period (14)	
EU12	≤ One 60 minute period per week for testing ≤ 300 hours of operation per 12-month rolling period	No. 2 Fuel Oil ≤ 0.3% S by weight	NA	NA	310 CMR 7.02(8)(i)2. (Hour Restrictions) MBR-94-COM-026 (Minute and Hour Restrictions)
			PM	≤ 0.10 lb/MMBTU	310 CMR 7.02(8)(h)
EU10	NA	No. 2 Fuel Oil ≤ 0.3% S by weight	NO_x	≤ AlE_{NOx} (1)	MBR-05-ECP-002 310 CMR 7.19(2)(g) 310 CMR 7.00: Appendix B(3)
			CO	NA (2)	MBR-05-ECP-002 310 CMR 7.19(7)(a)4.
			PM	≤ 0.12 lb/MMBTU	310 CMR 7.02(8)(d)
EU1, EU2, EU3, EU12, EU10	NA	No. 2 Fuel Oil ≤ 0.3% S by weight	S in Fuel	≤ 0.17 lb/MMBTU	310 CMR 7.05(1)(a)2.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU10	NA	All Fuels	NO_x	See "Special Terms and Conditions", Section 5(e)	310 CMR 7.28
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU9B, EU10	NA	All Fuels	SO_2	≤ 1.2 lb/MMBTU (3)	310 CMR 7.22(1)
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	NA	All Fuels	NO_x	≤ 1.5 lb/MWh calculated over any consecutive 12 month period, recalculated monthly (**17**)	310 CMR 7.29(5)(a)1.a. MBR-01-729-002
				≤ 3.0 lb/MWh calculated over any individual month (**17**)	310 CMR 7.29(5)(a)1.b. MBR-01-729-002

Table 3

EU#	RESTRICTION	FUEL/RAW MATERIAL	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
			SO_2	≤ 6.0 lb/MWh calculated over any consecutive 12 month period, recalculated monthly (**17**)	310 CMR 7.29(5)(a)2.a. MBR-01-729-002
				≤ 3.0 lb/MWh calculated over any 12 month period, recalculated monthly (**17**)	310 CMR 7.29(5)(a)2.b.i. MBR-01-729-002
				≤ 6.0 lb/MWh calculated over any individual month (**17**)	310 CMR 7.29(5)(a)2.b.ii. MBR-01-729-002
			CO_2	≤ 7,596,390 tons in the calendar year (**5, 17**)	310 CMR 7.29(5)(a)5.a.
				≤ 1,800 lb/MWh in the calendar year (**17**)	310 CMR 7.29(5)(a)5.b.
			CO	NA (**16**)	310 CMR 7.29(5)(a)4.
			$PM_{2.5}$	NA (**16**)	310 CMR 7.29(5)(a)6.
			SO_2	See "Special Terms and Conditions", Section 5(c)	40 CFR Part 73
EU13, EU14, EU15, EU16	Solvent Usage Rate per EU: < 100 gallons per month	Safety Kleen Premium Solvent	VOC	NA	310 CMR 7.03(8) (Usage Rate Restriction)
Facility-Wide	NA	All Fuels	NO_x	≤ 3,000 tons per calendar year (State Enforceable Only) ≤ 3,820 tons per 12-month rolling period	MBR-99-COM-012
			SO_2	≤ 10,000 tons per calendar year (State Enforceable Only) ≤ 17,074 tons per 12-month rolling period	
			Noise	See "Special Terms and Conditions", Section 5(d)	
			Smoke	< No. 1 of Chart [1], except No. 1 to < No. 2 of Chart for ≤ 6 minutes during any one hour	310 CMR 7.06(1)(a)
Facility-Wide (except EU5, EU6, EU7, EU8, EU9B, EU11)	NA	All Fuels	Opacity	< 20 percent, except 20 to < 40 percent for ≤ 2 minutes during any one hour	310 CMR 7.06(1)(b)

Table 3 Notes:

1 See "Special Terms and Conditions", Section 5(u). In accordance with 310 CMR 7.19(7)(a)3., for stationary combustion turbines not using a continuous emissions monitoring system that satisfies the requirements of 310 CMR 7.19(13)(b) to determine compliance, compliance with the unit specific allowable NO_x emission rate for EU10 of 100 ppmvd corrected to fifteen (15) percent oxygen when firing oil, as stated in 310 CMR 7.19(7)(a)2.b., shall be based on a one-hour averaging time. In accordance with Approval MBR-05-ECP-002, compliance with this NO_x emission standard under 310 CMR 7.19(7)(a)2.b. shall be demonstrated by utilizing NO_x Emission Reduction Credits (ERC_{NOx}), as per 310 CMR 7.19(2)(g), which are certified by MassDEP pursuant to 310 CMR 7.00: Appendix B(3) and as calculated according to "Special Terms and Conditions", Section 5(u).

2 In accordance with 310 CMR 7.19(7)(a)3., for stationary combustion turbines not using a continuous emissions monitoring system that satisfies the requirements of 310 CMR 7.19(13)(b) to determine compliance, compliance with the unit specific allowable CO emission rate for EU10 of 100 ppmvd corrected to fifteen (15) percent oxygen when firing oil, as stated in 310 CMR 7.19(7)(a)2.c., shall be based on a one-hour averaging time. Notwithstanding this CO emission standard, as stated in 310 CMR 7.19(7)(a)2.c., MassDEP will allow the Permittee to operate EU10 at a higher CO emission standard, pursuant to Regulation 310 CMR 7.19(7)(a)4., provided that combustion conditions do not deteriorate as demonstrated by a decrease in the generator speed to exhaust temperature ratio when corrected to standard conditions, or by other means acceptable to MassDEP and the United States Environmental Protection Agency (EPA).

3 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.

4 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.

5 If MassDEP has received a technically complete Plan Approval Application under 310 CMR 7.02 for a new or re-powered electric generating unit subject to 40 CFR Part 72 at an affected facility prior to May 11, 2001, then the emissions from the new or re-powered unit may be included in the calculation of historical actual emissions. The calculation of historical actual emissions which includes emissions from a new or re-powered unit shall not include emissions from any unit shutdown or removed from operation at the affected facility that is included in the technically complete Plan Approval Application pursuant to 310 CMR 7.02. Compliance may be demonstrated by using offsite reductions or sequestration to offset emissions above the historical actual emissions, provided MassDEP determines such reductions or sequestration are real, surplus, verifiable, permanent, and enforceable, as defined at 310 CMR 7.00: Appendix B. (310 CMR 7.29(5)(a)5.)

6 $$PS_{NOx} = \frac{0.25 \times (HI_1) + 0.20 \times (HI_2)}{(HI_1 + HI_2)}$$

PS_{NOx} = prorated NOx emission limit when burning different fuels, lb/MMBtu
HI_1 = heat input for No. 6 Fuel Oil, MMBTU
HI_2 = heat input for Natural Gas, MMBTU

The PS_{NOx} limit applies only when the combined annual heat input of all cofired fuels (other than the primary fuel) exceeds 5 percent of the total annual heat input of an EU, based on a twelve (12) month rolling average.

7 Compliance with emission limit(s)/standard(s) shall be based on a calendar day averaging time. In accordance with "MassDEP's Response to Comments on Proposed Amendments to 310 CMR 7.00: RACT for NO_x" dated June 1994, periods during start-up/shutdown may be excluded from the calendar day NO_x and CO emission rate compliance averaging time as long as the mass emission rate, in pounds of NO_x and/or CO per hour, from the EU does not exceed the mass emission rate that would occur at the maximum firing rate. Start-ups are determined to be the period from initiation of flame to reaching minimum operating load. Start-up periods shall last no longer than twenty-four (24) hours.

8 Emission limits are one-hour block averages and do not apply during start-up/shutdown and equipment cleaning. Start-ups shall not last longer than 3 hours or for a duration that may be otherwise practical to achieve from a cold, warm, or hot turbine condition.

9 Emission rates are based on 100% load and -12°F ambient while supplemental duct firing.

10 Emission limits are one-hour block averages and apply over the normal operating range up to 100% load.

11 Operation below 56% power is limited to no more than 3 hours duration for each start up and shutdown or for a duration that may be otherwise practical to achieve from a cold, warm, or hot turbine condition.

12 Whenever any gas turbine is operating below 56% power or load, the VOC emissions shall be considered as occurring at the rate determined during compliance testing for start up conditions. If any of the gas turbines is operating at 56% load or greater, and if CO emissions are below the CO emission limit at the given gas turbine operating conditions, the VOC emissions shall be considered as meeting the emission limits contained in Table 3 subject to correlation as follows. If any of the gas turbines is operating at 56% load or greater, and if CO emissions are above the CO emission limit at the given gas turbine operating conditions, the VOC

emissions shall be considered as occurring at a rate determined by the equation: $VOC_{actual} = VOC_{LIMIT} \times (CO_{actual}/CO_{limit})$, pending the outcome of compliance testing after which a VOC/CO correlation curve for each turbine will be developed and used for VOC compliance determination purposes.

13 Fuel Oil consumption per calendar year is based on a fuel heating value of 147,000 BTU/gallon and 720 hours of operation per unit (State-Enforceable). This corresponds to a maximum combined energy input of 3,132,000 MMBTU, Higher Heating Value (HHV) per calendar year. Fuel Oil consumption per 12-month rolling period is based on a fuel heating value of 147,000 BTU/gallon and 1440 hours of operation per unit. This corresponds to a maximum combined energy input of 6,264,000 MMBTU (HHV) per 12-month rolling period.

14 Emission limits are for the combined operation of EU5, EU6, EU7, EU8, EU9B, and EU11. Emissions for the combustion turbine power blocks EU5, EU6, EU7, and EU8 are based upon 8,760 hours of natural gas firing at 100% duct-fired load and an annual average inlet temperature of 51°F ambient, and include start-up emissions. Emissions for the auxiliary boiler EU9B are based on a restricted fuel consumption of 40.825 million cubic feet of natural gas per 12-month rolling period (corresponding to 250 hours of full load operation). Emissions for the emergency diesel generator EU11 are based on a restricted fuel consumption of 8,250 gallons per 12-month rolling period of transportation diesel fuel oil having a sulfur content that does not exceed 0.05% by weight (corresponding to 75 hours of full load operation). Emission limits are determined as equal to the total combustion turbine power block emissions since neither the auxiliary boiler nor emergency diesel generator will operate concurrently with combustion turbine base load operation. Auxiliary boiler operation will only be required 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. The emergency diesel generator will only operate as required to shutdown the combustion turbine power blocks and only in the event that power to achieve shutdown is not available from the electric power grid.

15 Applicable NO_x emission rate under 310 CMR 7.19(4)(a)3. is for tangential fired boiler.

16 MassDEP has not promulgated emission limits/standards, or the monitoring methodology, under 310 CMR 7.29 for CO and $PM_{2.5}$ as of the issue date of this Operating Permit.

17 Refer to "Compliance Schedule", Section 8 for compliance deadlines with NO_x, SO_2, and CO_2 emission limits/standards pursuant to 310 CMR 7.29.

18 Compliance with the emission limit/standard and percent reduction are both determined on a 30-day rolling average basis, or as otherwise provided in the Custom Monitoring Schedule issued by EPA on July 3, 2002.

19 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.

20 Emission limit/standard applies to supplemental duct firing HRSG burners only.

Table 3 Key:

EU# = Emission Unit Number
lb/MMBTU = pound(s) per million British Thermal Units
lb/hr = pound(s) per hour
ppmvd = parts per million, dry volume basis
ppmvd @ 3% O_2 = parts per million, dry volume basis corrected to 3 percent Oxygen
ppmvd @ 15% O_2 = parts per million, dry volume basis corrected to 15 percent Oxygen
gm/bhp-hr = gram(s) per brake horsepower hour
lb/MWh = pound(s) per Megawatt-hour of net electrical output
NO_x = Nitrogen Oxides
CO = Carbon Monoxide
CO_2 = Carbon Dioxide

VOC = Volatile Organic Compounds
PM = Particulate Matter
PM_{10} = Particulate Matter less than 10 microns in aerodynamic diameter
$PM_{2.5}$ = Particulate Matter less than 2.5 microns in aerodynamic diameter
S = Sulfur
SO_2 = Sulfur Dioxide
NH_3 = Ammonia
O_2 = Oxygen
% = percent
< = less than
≤ = less than or equal to
≥ = greater than or equal to
NA = Not Applicable
No. = Number
HRSG = Heat Recovery Steam Generator

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:

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2, EU3, EU4	In accordance with 310 CMR 7.14(2), 310 CMR 7.19(13)(a)1., and Approval MBR-94-COM-026, compliance with NO_x emission limits/standards shall be demonstrated with Continuous Emissions Monitoring Systems (CEMS). The NO_x CEMS shall meet the requirements specified in 310 CMR 7.19(13)(b). In accordance with the Acid Rain Program 40 CFR Part 72, monitor NO_x emissions pursuant to 40 CFR Part 75 and use the procedures contained therein to gather and analyze data, provide quality assurance and quality control in order to determine compliance with 310 CMR 7.19, except that the missing data routine and bias adjustment factors contained in 40 CFR Part 75 need not be applied. Compliance with 40 CFR Part 75 shall constitute compliance with this requirement.
EU5, EU6, EU7, EU8	In accordance with Approval MBR-99-COM-012, monitor NO_x emissions with CEMS.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with 310 CMR 7.14(2) and the Acid Rain Program 40 CFR Part 72, monitor NO_x emissions with CEMS. The NO_x CEMS shall meet the requirements of 40 CFR Part 75 and use the procedures contained therein to gather and analyze data, provide quality assurance and quality control. Compliance with 40 CFR Part 75 shall constitute compliance with this requirement. In accordance with the Acid Rain Program 40 CFR Part 72, determine NO_x emissions in pounds per million British Thermal Units using the NO_x CEMS and determine heat input in million British Thermal Units per hour using the procedures contained in Appendix D and F of 40 CFR Part 75. Determine the hourly NO_x mass emissions by multiplying the above values together.
EU1, EU2, EU3, EU4, EU10	In accordance with 310 CMR 7.28(11)(a)(1), any person who owns, leases, operates or controls a budget unit that commences operation before January 1, 2002 shall install, operate and successfully complete all applicable certification testing requirements for monitoring heat input, NOx emission rate and NOx mass emissions pursuant to the requirements of 40 CFR Part 75, Subpart H by May 1, 2002.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU10	In accordance with 310 CMR 7.28(11)(a)(4), all monitoring systems are subject to initial performance testing and periodic calibration, accuracy testing and quality assurance/quality control testing as specified in 40 CFR Part 75, Subpart H.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU10	As required by 310 CMR 7.28(11)(a)(5), during a period when valid data is not being recorded by a monitoring system approved under 310 CMR 7.28, the missing or invalid data must be replaced with default data in accordance with the provisions of 40 CFR 75.70(f). The applicable missing data procedures are specified in 40 CFR Part 75 for NO_x emission rate in pounds per million British Thermal Units (lb/MMBtu), heat input, stack gas volumetric flow rate, oil density, Gross Calorific Value (GCV) or fuel flow rate.
	In accordance with 310 CMR 7.28(11)(a)(6), NOx emissions data must be reported to the NOx Emissions Tracking System (NETS) in accordance with 310 CMR 7.28(13).

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
	In accordance with 310 CMR 7.28(11)(a)(7), budget units must report data pursuant to the requirements of 310 CMR 7.28(11) for every hour.
	In accordance with 310 CMR 7.28(11)(b), any person who owns, leases, operates or controls a budget unit subject to 310 CMR 7.28 must comply with the notification requirements in 40 CFR 75.61, where applicable.
EU5, EU6, EU7, EU8	In accordance with 310 CMR 7.28(11)(a)(2), a person who owns, leases, operates or controls a new budget unit which commences operation on or after January 1, 2002, must install, operate and successfully complete all applicable certification testing requirements for monitoring heat input, NOx emission rate and NOx mass emissions pursuant to the requirements of 40 CFR Part 75 Subpart H by the later of the following dates: May 1, 2002; or the earlier of 180 days after the date on which the unit commences operation or 90 days after the date on which the unit commences commercial operation.
	In accordance with Approval MBR-99-COM-012, compliance with NH_3 emission limits/standards shall be demonstrated with CEMS.
	In accordance with Approval MBR-99-COM-012, the Permittee shall monitor the level of ammonia in the ammonia storage tanks with high and low level audible alarm monitors.
	In accordance with Approval MBR-99-COM-012, monitor on a continuous basis temperatures at the inlets to the SCR and CO catalysts with continuous monitors equipped with alarm systems.
EU1, EU2, EU3, EU4	In accordance with 310 CMR 7.19(13)(a)1. and Approval MBR-94-COM-026, compliance with CO emission limits/standards shall be demonstrated with CEMS as specified in 310 CMR 7.19(13)(b). CO emissions shall be monitored as specified in 310 CMR 7.19(13)(b)1. through 7.19(13)(b)12.. 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.
EU5, EU6, EU7, EU8	In accordance with Approval MBR-99-COM-012, 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 Approval MBR-99-COM-012, compliance with VOC emission limits/standards shall be demonstrated by monitoring CO emissions and utilizing a VOC/CO correlation curve determined from compliance testing.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with 310 CMR 7.14(2), the Acid Rain Program 40 CFR Part 72, and Approval MBR-99-COM-012, calculate hourly SO_2 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_2 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, where applicable.
	In accordance with 310 CMR 7.14(2) and the Acid Rain Program 40 CFR Part 72, calculate carbon dioxide (CO_2) emissions in the flue gas from heat input data utilizing the procedures in 40 CFR Part 75, Appendix G.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with 310 CMR 7.14(2) and the Acid Rain Program 40 CFR Part 72 and 40 CFR Part 75, and Approval MBR-99-COM-012 for EU5, EU6, EU7, and EU8, 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.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
	In accordance with 310 CMR 7.19(13), 40 CFR Part 75, and Approval MBR-99-COM-012, 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_2 emissions and heat input missing data substitution.
	In accordance with 310 CMR 7.19(13), 40 CFR Part 75, and Approval MBR-99-COM-012, monitor any occurrences when visible emissions (opacity and/or smoke exclusive of uncombined water) and emission rates of NO_x, NH_3, CO, VOC, SO_2, and CO_2, as applicable, are in excess of the emission limits/standards contained in Table 3.
EU5, EU6, EU7, EU8, EU9B, EU11	In accordance with Approval MBR-99-COM-012, all periods of excess emissions, 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 EU5, EU6, EU7, EU8, EU9B, and EU11 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).
EU5, EU6, EU7, EU8	In accordance with Approval MBR-99-COM-012, measure oxygen (O_2) in the flue gas with CEMS that meet the requirements of 40 CFR Part 75.
	Monitor/test in accordance with 40 CFR Part 60, Subpart GG for the gas turbines and 40 CFR Part 60, Subpart Da for the supplemental duct firing HRSG burners, as applicable.
	In accordance with Approval MBR-99-COM-012, monitor gas turbine inlet and ambient temperatures.
	In accordance with Approval MBR-99-COM-012, 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 40 CFR Part 60, Subpart GG, 60.334(b)(2). Provided that the Permittee uses pipeline-quality Natural Gas, the Permittee shall monitor only sulfur content according to the frequency schedule established within the Custom Monitoring Schedule issued by EPA on April 3, 2002.
	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 Approval MBR-99-COM-012, monitor audible and visible alarms on CEMS and COMS that activate whenever emissions exceed the limits in Table 3.
	In accordance with Approval MBR-99-COM-012, 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 Approval MBR-99-COM-012, the Permittee shall use and maintain its CEMS and COMS servicing the facility as "direct-compliance" monitors to measure NO_x, CO, O_2, NH_3, and Opacity. "Direct-compliance" monitors generate data that legally documents the compliance status of a source.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU9A, EU9B, EU10, EU11, EU12	Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2. and Approval MBR-99-COM-012, monitor unit operations, as necessary, to ensure continuous compliance with PM or PM_{10} emission limits, as applicable.
EU1, EU2, EU3, EU4	In accordance with 310 CMR 7.13 and MassDEP's Test Protocol Approval letter of May 9, 2000, conduct testing for PM on an annual basis prior to November 1. The testing shall include two types of particulate matter: a) particulate matter as measured by EPA Method 5, designated as "front-half" PM and b) particulate matter as measured by EPA Method 202, designated as "back-half" PM. The "front-half" PM will continue to be used as the compliance measure, while the "back-half" PM will be used for informational purposes only. This testing shall be witnessed by MassDEP personnel on a mutually agreed upon date(s).

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
	In accordance with 310 CMR 7.04(2)(a), no person shall cause, suffer, allow, or permit the burning of any grade oil or solid fuel in any fuel utilization facility having an energy input capacity rated by MassDEP equal to or greater than 40 MMBTU per hour, unless such facility is equipped with a smoke density sensing instrument and recorder which are properly maintained in an accurate operating condition, operates continuously and is equipped with an audible alarm to signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart. Compliance with 40 CFR Part 75 for opacity monitoring shall constitute compliance with this requirement.
	In accordance with 310 CMR 7.19(13)(d)3., measure for each unit on a daily basis: type fuel(s) burned each day, heat content of each fuel, the total heating value of the fuel consumed for each day, the actual emission rate (for emissions units demonstrating compliance with CEMS), and the allowable emission rate for NO_x and CO.
	In accordance with 310 CMR 7.19(13)(d)5. and 310 CMR 7.19(13)(d)6., monitor nitrogen content of each new shipment of No. 6 Fuel Oil received, by one of the following methods: (1) monitor through obtaining a certification from the fuel oil supplier that includes the following information: a. the name of the fuel oil supplier; b. the nitrogen content* of each oil shipment; and c. the location where the sample was drawn for analysis to determine the nitrogen content of the fuel oil, specifically including whether the fuel oil was sampled as delivered to the Permittee's facility or whether the sample was drawn from fuel oil in storage at the fuel oil supplier's or fuel oil refiner's facility or another location. (2) sample and analyze the fuel oil for nitrogen content* immediately after the fuel oil tank is filled and before any fuel oil is combusted. * The shipment certification or analysis of nitrogen content of the fuel oil shall be in accordance with the applicable ASTM test methods or any other method approved by MassDEP and EPA.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU9A, EU9B, EU10, EU11, EU12	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.
EU1, EU2, EU3, EU4	In accordance with 310 CMR 7.04(5), operate and maintain automatic viscosity controllers of a type approved by MassDEP to control the viscosity of No. 6 Fuel Oil to the burners.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, actual emissions shall be monitored for individual units and monitored as a facility total for all units included in the calculation demonstrating compliance. Actual emissions shall be monitored in accordance with 40 CFR Part 75 for SO_2, CO_2, and NO_x. MassDEP shall detail the monitoring methodology for CO and $PM_{2.5}$ at the time regulations are promulgated for those parameters.
	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, monitor actual net electrical output, expressed in megawatt-hours. Actual net electrical output shall be provided for individual units and as a facility total for all units included in the calculation demonstrating compliance.
EU9A	In accordance with Temporary Approval MBR-2000-COM-001, measure the hours of operation, and the amount of Natural Gas consumed on a monthly basis utilizing a calibrated and maintained fuel metering device and recorder. Utilize this information to monitor the amount of Natural Gas consumed on a twelve month rolling period basis and over the lifetime of the unit.
	Monitor/test in accordance with 40 CFR Part 60, Subpart Dc, as applicable.
EU9B	In accordance with Approval MBR-03-COM-010/MBR-99-COM-012, measure the amount of Natural Gas consumed monthly. Utilize this information to ensure compliance with an annual capacity factor of ten (10) percent or less.
	Consistent with the requirements of Approval MBR-03-COM-010/MBR-99-COM-012, conduct an initial stack test for NO_x and CO within 180 days of initial startup, in accordance with 310 CMR 7.13 and 40 CFR Part 60, Appendix A.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
	In accordance with Approval MBR-03-COM-010/MBR-99-COM-012, 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 40 CFR Part 60, Subpart Db, as applicable, and Approval MBR-03-COM-010/MBR-99-COM-012.
	Compliance with the SO_2 emission rate under the Massachusetts Acid Rain Law 310 CMR 7.22 shall be demonstrated through combustion of Natural Gas.
EU10	Conduct Emissions Compliance Testing (stack testing) annually prior to October 1, in accordance with Approval MBR-05-ECP-002, 310 CMR 7.13, 310 CMR 7.19(13)(c), and 40 CFR Part 60, Appendix A for NO_x and CO.
	In accordance with 310 CMR 7.19(13)(d)3. and Approval MBR-05-ECP-002, monitor for the combustion turbine unit, when in operation, on a daily basis: type(s) fuel burned, heat content of each fuel, total consumption of each fuel, total heating value of each fuel consumed, and actual hours of operation for each fuel burned. In accordance with Approval MBR-05-ECP-002, utilize this information to calculate the allowable NO_x emissions (AlE_{NOX}) in pounds, the actual NO_x emissions (AcE_{NOx}) in pounds, the difference between actual and allowable NO_x emissions, and the quantity of Emission Reduction Credits (ERC_{NOx}), both ozone (May 1 through September 30) and non-ozone season (October 1 through April 30), in pounds, required to comply with 310 CMR 7.19. In accordance with Approval MBR-05-ECP-002, monitor that the amount of ERC_{NOx} actually obtained includes five (5) percent more than the amount needed for compliance (See "Special Terms and Conditions", Section 5(u)). Fuel heat content information may be provided by fuel suppliers.
	In accordance with Approval MBR-05-ECP-002, monitor, when in operation, on an hourly basis the generator speed, exhaust temperature, and generator speed to exhaust temperature ratio, corrected to standard conditions, to ensure that combustion conditions do not deteriorate as indicated by a decrease in the generator speed to exhaust temperature ratio when corrected to standard conditions, or by other means acceptable to MassDEP and EPA.
	Compliance with the Massachusetts Acid Rain Law 310 CMR 7.22 shall be demonstrated through monitoring for and compliance with 310 CMR 7.05(1), and monitoring as required by 310 CMR 7.19(13)(d)3. and Approval MBR-05-ECP-002.
	In accordance with 310 CMR 7.04(2)(a), no person shall cause, suffer, allow, or permit the burning of any grade oil or solid fuel in any fuel utilization facility having an energy input capacity rated by MassDEP equal to or greater than 40 MMBTU per hour, unless such facility is equipped with a smoke density sensing instrument and recorder which are properly maintained in an accurate operating condition, operates continuously and is equipped with an audible alarm to signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart. Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., the monitoring of Opacity as determined in accordance with 40 CFR Part 60, Appendix A, Method 9 shall constitute compliance with this requirement. This method shall also apply to any detached plumes.
EU11	In accordance with Approval MBR-99-COM-012, measure the hours of operation and the amount of fuel oil burned on a monthly basis.
EU12	In accordance with Approval MBR-94-COM-026, measure weekly testing time in minutes and the hours of operation per twelve month rolling period using the generator's operating clock meter.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU12	In accordance with 310 CMR 7.02(8)(i), any person owning, operating or controlling an emergency or standby engine(s) constructed, substantially reconstructed or altered prior to June 1, 1990, having an energy input capacity equal to or greater than 3,000,000 but less than 10,000,000 BTU per hour individually shall operate said engine(s) in compliance with 310 CMR 7.02(8)(i)1. through 5. In accordance with 310 CMR 7.02(8)(i)2., the engine(s) may be operated no more than 300 hours per any rolling 12 month period, including the normal maintenance and testing procedure as recommended by the manufacturer and periods when the primary power source for a facility has been lost during an emergency, such as a power outage, an on-site disaster or an act of God. The facility shall monitor, as necessary, to demonstrate compliance with the information required by 310 CMR 7.02(8)(i)3. Such information includes: a. Information on equipment type, make and model, and maximum power input/output; and, b. Monthly logs of hours of operation, gallons of fuel used, fuel type and heating value, and a monthly calculation of the total hours operated and gallons of fuel used in the previous twelve months shall be kept on site; and, c. Purchase orders, invoices and other documents to support information in the monthly log.
EU1, EU2, EU3, EU4, EU10, EU11, EU12	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.
EU13, EU14, EU15, EU16	Monitor solvent usage rate to ensure compliance with 310 CMR 7.03(8).
	Monitor operations to ensure compliance with 310 CMR 7.18(8)(a), 310 CMR 7.18(8)(d), and 310 CMR 7.18(8)(e).
	In accordance with 310 CMR 7.18(8)(g), persons subject to 310 CMR 7.18(8) shall, upon request of MassDEP, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with a method approved by MassDEP and EPA.
Facility-Wide	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: (a) to be conducted by a person knowledgeable in stack testing, (b) to be conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and (c) to be conducted in the presence of a representative of MassDEP when such is deemed necessary. In accordance with Approval MBR-05-ECP-002, conduct any other testing or testing methodology if and when requested by MassDEP or EPA.
	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.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with Approval MBR-94-COM-026 and Approval MBR-99-COM-012, record on a continuous basis emissions of NOx in accordance with the requirements of 40 CFR Part 75.
EU1, EU2, EU3, EU4, EU5, EU6,	The facility shall comply with all applicable record keeping requirements contained in 40 CFR Part 60, 40 CFR Part 72, 40 CFR Part 75, and 310 CMR 7.28.

Table 5

EU#	RECORD KEEPING REQUIREMENTS
EU7, EU8, EU10	In accordance with 310 CMR 7.28(8)(e), information on the Authorized Account Representative (AAR) Form must be kept current.
	As required by 310 CMR 7.28(12), any person who owns, leases, operates or controls a budget unit must keep all measurements, data, reports and other information required by 310 CMR 7.28 for five years, or any other period consistent with the budget unit's Operating Permit.
EU5, EU6, EU7, EU8	In accordance with Approval MBR-99-COM-012, record on a continuous basis emissions of NH_3.
	In accordance with Approval MBR-99-COM-012, 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 Approval MBR-99-COM-012, record on a continuous basis temperatures at the inlets to the SCR and CO catalysts with continuous monitors equipped with alarm systems.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with Approval MBR-94-COM-026 and Approval MBR-99-COM-012, record on a continuous basis emissions of CO in accordance with the requirements of 310 CMR 7.19(13)(b)1. through 7.19(13)(b)12., 40 CFR Part 60, Appendix B, and 40 CFR Part 60 Appendix F. The requirements of 310 CMR 7.19(13)(b) 1. through 7.19(13)(b)12. only apply to EU1, EU2, EU3, and EU4.
EU5, EU6, EU7, EU8	In accordance with Approval MBR-99-COM-012, 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.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	Record on a hourly basis emissions of SO_2 in accordance with the requirements of 40 CFR Part 75.
	Record on a 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_2 emissions. The heat input of each fuel burned shall be calculated using the procedures in Appendix F of 40 CFR Part 75, and SO_2 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_2 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 310 CMR 7.19(13), 40 CFR Part 75, and Approval MBR-99-COM-012, record operating time of each EU and the date and amount of time that any CEMS or COMS are inoperative.
	In accordance with 310 CMR 7.19(13), 40 CFR Part 75, and Approval MBR-99-COM-012, record any occurrences when visible emissions (opacity and/or smoke exclusive of uncombined water) and emission rates of NO_x, NH_3, CO, VOC, SO_2, and CO_2, as applicable, are in excess of the emission limits/standards contained in Table 3.
	Maintain records required by 40 CFR Part 75, Subpart F.
EU5, EU6, EU7, EU8, EU9B, EU11	In accordance with Approval MBR-99-COM-012, 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 EU5, EU6, EU7, EU8, EU9B, and EU11 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).
EU5, EU6, EU7, EU8	Record on a continuous basis O_2 in the flue gas in accordance with the requirements of 40 CFR Part 75.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
	Maintain records in accordance with 40 CFR Part 60, Subpart GG for the gas turbines and 40 CFR Part 60, Subpart Da for the supplemental duct firing HRSG burners, as applicable.
	In accordance with Approval MBR-99-COM-012, maintain records of gas turbine inlet and ambient temperatures.
	In accordance with Approval MBR-99-COM-012, 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 40 CFR Part 60, Subpart GG 60.334(b)(2). Record the sulfur content of Natural Gas 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 Natural Gas, if and when applicable.
	In accordance with Approval MBR-99-COM-012, obtain, 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 Approval MBR-99-COM-012, 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 Approval MBR-99-COM-012, 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 MassDEP's examination upon request. Record keeping shall, at a minimum, include: 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, 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, 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.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU9A, EU9B, EU10, EU11, EU12	Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2. and Approval MBR-99-COM-012, record unit parameters, as necessary, to ensure continuous compliance with PM or PM_{10} emission limits, as applicable.
EU1, EU2, EU3, EU4	Consistent with the requirements of 310 CMR 7.13 and MassDEP's Test Protocol Approval letter of May 9, 2000, maintain test results and reports of annual testing for PM conducted prior to November 1.
	Consistent with the requirements of 310 CMR 7.04(2)(a), maintain records of opacity measured in accordance with 40 CFR Part 75 and 40 CFR Part 60, Appendix B.
	In accordance with 310 CMR 7.19(13)(d)1., maintain a record of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS.
	In accordance with 310 CMR 7.19(13)(d)3., maintain records for each unit on a daily basis: type fuel(s) burned each day, heat content of each fuel, the total heating value of the fuel consumed for each day, the actual emission rate (for emissions units demonstrating compliance with CEMS), and the allowable emission rate for NOx and CO.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2, EU3, EU4	In accordance with 310 CMR 7.19(13)(d)7., maintain records of the nitrogen content of each new shipment of No. 6 Fuel Oil received. Such records shall include fuel analysis results and/or fuel oil supplier certifications that includes the name of the fuel oil supplier and the location where the sample was drawn for analysis to determine the nitrogen content.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU9A, EU9B, EU10, EU11, EU12	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.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, maintain a record of actual emissions for each regulated pollutant for each of the preceding 12 months. Actual emissions shall be recorded for individual units and as a facility total for all units included in the calculation demonstrating compliance. Actual emissions provided under this section shall be recorded in accordance with 40 CFR Part 75 for SO_2, CO_2, and NO_x, and for CO and $PM_{2.5}$ at the time regulations are promulgated by MassDEP for those parameters.
	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, maintain a record of actual net electrical output for each of the preceding 12 months, expressed in megawatt-hours. Records of actual net electrical output shall be maintained for individual units and as a facility total for all units included in the calculation demonstrating compliance.
	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, maintain a record of the resulting output-based emission rates for each of the preceding 12 months, and each of the 12 consecutive rolling month time periods, expressed in pounds per megawatt-hour. Output based emission rates shall be provided for individual emission units and as a facility total for all units included in the calculation demonstrating compliance.
	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, keep all measurements, data, reports and other information required by 310 CMR 7.29 on-site for a minimum of five years.
EU9A	In accordance with Temporary Approval MBR-2000-COM-001, record the hours of operation and the amount of Natural Gas consumed. Such records shall be maintained monthly, on a twelve month rolling period basis, and over the lifetime of the unit. In addition, these records shall be used to calculate NO_x emissions per month and per 12-month rolling period. For the purpose of calculating emissions, a heat content value of 1,000 BTU per cubic foot of Natural Gas burned shall be used.
	In accordance with Temporary Approval MBR-2000-COM-001, the Permittee shall post a copy of this Temporary Approval letter adjacent to the subject boiler.
	In accordance with Temporary Approval MBR-2000-COM-001, maintain a copy of the Standard Operating and Maintenance Procedures for the subject boiler at or nearby the subject boiler.
	Maintain records in accordance with 40 CFR Part 60, Subpart Dc, as applicable.
EU9B	In accordance with Approval MBR-03-COM-010/MBR-99-COM-012, maintain records of the amount of Natural Gas consumed on a twelve month rolling period basis. In addition, maintain records of the calculations that demonstrate compliance with an annual capacity factor of ten (10) percent or less.
	Consistent with the requirements of Approval MBR-03-COM-010/MBR-99-COM-012, maintain records of the initial stack test for NO_x and CO, which is required to be conducted within 180 days of initial startup and performed in accordance with 310 CMR 7.13 and 40 CFR Part 60, Appendix A.
	In accordance with 310 CMR 7.19(13)(d)3., and Approval MBR-03-COM-010/MBR-99-COM-012, record on a daily basis: type fuel(s) burned, heat content of each fuel, and total heating value of fuel consumed.
	Record in accordance with 40 CFR Part 60, Subpart Db, as applicable.
	Maintain records that demonstrate compliance with the SO_2 emission rate under the Massachusetts Acid Rain Law 310 CMR 7.22.
EU10	Maintain the test results of any Emissions Compliance Testing (stack testing) performed in accordance with Approval MBR-05-ECP-002, 310 CMR 7.13, 310 CMR 7.19(13)(c), and 40 CFR Part 60, Appendix A for NO_x and CO.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU10	In accordance with 310 CMR 7.19(13)(d)3. and Approval MBR-05-ECP-002, record for the combustion turbine Unit, when in operation, on a daily basis: type(s) fuel burned, heat content of each fuel, total consumption of each fuel, total heating value of each fuel consumed, and actual hours of operation for each fuel burned. In accordance with Approval MBR-05-ECP-002, utilize this information to calculate and record the allowable NO_x emissions (AlE_{NOX}) in pounds, the actual NO_x emissions (AcE_{NOx}) in pounds, the difference between actual and allowable NO_x emissions, and the quantity of Emission Reduction Credits (ERC_{NOx}), both ozone (May 1 through September 30) and non-ozone season (October 1 through April 30), in pounds, required to comply with 310 CMR 7.19. In accordance with Approval MBR-05-ECP-002, record the amount of ERC_{NOx}, both ozone (May 1 through September 30) and non-ozone season (October 1 through April 30), actually obtained. Said records shall also identify the source of ERC_{NOx} obtained, including company name, emission unit and method of generation, date of generation, and the Transmittal Number of the application for certification of ERC_{NOx}.
	In accordance with Approval MBR-05-ECP-002, record for each Combustion Turbine Unit, when in operation, on an hourly basis the generator speed, exhaust temperature, and generator speed to exhaust temperature ratio, corrected to standard conditions.
	Compliance with the Massachusetts Acid Rain Law 310 CMR 7.22 shall be demonstrated through record keeping for and compliance with fuel sulfur requirements, and record keeping as required by 310 CMR 7.19(13)(d)3. and Approval MBR-05-ECP-002.
	Consistent with the requirements of 310 CMR 7.04(2)(a), maintain records of Opacity determined in accordance with 40 CFR Part 60, Appendix A, Method 9. This method shall also apply to any detached plumes.
EU1, EU2, EU3, EU4, EU9B, EU10	In accordance with 310 CMR 7.19(13)(d)8., Approval MBR-94-COM-026, Approval MBR-05-ECP-002, and Approval MBR-03-COM-010/MBR-99-COM-012, all records required by 310 CMR 7.19(13)(d), including computer retained and generated data, shall be kept in a permanently bound log book or any other form acceptable to MassDEP.
EU11	In accordance with Approval MBR-99-COM-012, maintain records of the hours of operation and the amount of fuel oil consumed on a twelve month rolling period basis.
EU12	In accordance with Approval MBR-94-COM-026, record weekly testing time in minutes and the hours of operation per twelve month rolling period within a generator's operating log.
	In accordance with 310 CMR 7.02(8)(i)3., maintain records of the following information: a. Information on equipment type, make and model, and maximum power input/output; and, b. Monthly logs of hours of operation, gallons of fuel used, fuel type and heating value, and a monthly calculation of the total hours operated and gallons of fuel used in the previous twelve months shall be kept on site; and, c. Purchase orders, invoices and other documents to support information in the monthly log.
EU1, EU2, EU3, EU4, EU10, EU11, EU12	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.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU9B, EU10, EU11, EU12	In accordance with Approval MBR-94-COM-016, Approval MBR-05-ECP-002, and Approval MBR-99-COM-012, maintain on-site, at all times, a copy of the Standard Operating and Maintenance Procedure (SOMP) for the subject emission units.
EU13, EU14, EU15, EU16	In accordance with 310 CMR 7.03(6), a record keeping system shall be established and continued in sufficient detail to document the date of construction, substantial reconstruction or alteration and that the respective emission rates, operational limitations, equipment specifications and other requirements pursuant to 310 CMR 7.03 are met. All records shall be maintained up-to-date such that year-to-date information is readily available for MassDEP's examination.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU13, EU14, EU15, EU16	In accordance with 310 CMR 7.18(8)(f), any person subject to 310 CMR 7.18(8)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with an instantaneous averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of MassDEP and EPA in accordance with the requirements of an approved compliance plan upon request. Such records shall include, but are not limited to: 1. identity, quantity, formulation and density of solvent(s) used; 2. quantity, formulation and density of all waste solvent(s) generated; 3. actual operational and performance characteristics of the degreaser and any appurtenant emissions capture and control equipment, if applicable; and 4. any other requirements specified by MassDEP in any approval(s) and/or order(s) issued to the person.
Facility-Wide	In accordance with Approval MBR-99-COM-012, 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 Approval MBR-05-ECP-002, maintain the test results of any other testing or testing methodology required by MassDEP or EPA.
	Maintain records for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.
	Keep copies of Source Registration/Emission Statement Forms submitted annually to MassDEP as required per 310 CMR 7.12(1)(d).
	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.

Table 6	
EU#	REPORTING REQUIREMENTS
EU1, EU2, EU3, EU4	In accordance with 310 CMR 7.14(2) and 310 CMR 7.19(13)(d)2., submit CEMS Excess Emission Reports for each calendar quarter by the thirtieth (30th) day of April, July, October, and January covering the previous calendar periods of January through March, April through June, July through September, and October through December, respectively. Such reports shall contain EU operating time, CEMS/COMS downtime, and visible emissions (opacity and/or smoke exclusive of uncombined water) and emission rates of NOx and CO in excess of the emission limits/standards contained in Table 3.
	In accordance with 310 CMR 7.13 and MassDEP's Test Protocol Approval letter of May 9, 2000, on an annual basis: (a) submit a pretest protocol for the required PM Emissions Compliance Test (stack test) for review and MassDEP approval at least 30 days prior to the anticipated date of testing, (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 PM Emissions Compliance Testing, and (c) submit the Emissions Compliance Testing report for the review and MassDEP approval within 60 days of the completion of the PM Emissions Compliance Testing.
	In accordance with the Section 114 Reporting Requirement letter (CAA Docket No. AAA-02-0011) issued by EPA on March 10, 2003, submit COMS reports to MassDEP and EPA on a monthly basis by the tenth of the month following the month for which the report is due.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	Report as required by 40 CFR Part 75, Subpart G.

Table 6	
EU#	REPORTING REQUIREMENTS
EU5, EU6, EU7, EU8, EU9B, EU11	In accordance with Approval MBR-99-COM-012 and consistent with the criteria specified in General Condition 25, notify MassDEP by telephone or fax as soon as possible, but in any case no later than three (3) business days after the occurrence of any upsets or malfunctions to the facility equipment, air pollution control equipment, or monitoring equipment which result in an excess emission to the air and/or a condition of air pollution.
EU10	In accordance with 310 CMR 7.19(13)(c) and Approval MBR-05-ECP-002, on an annual basis: (a) submit a pretest protocol for the required Emissions Compliance Test (stack test) for review and written MassDEP approval at least 60 days prior to the anticipated date of testing, (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 (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.
	In accordance with Approval MBR-05-ECP-002, submit to this Regional Office, on a quarterly basis, a report that shows, for the combustion turbine unit: 1) monthly heat input, in MMBTU, from each type of fuel burned; 2) monthly quantity of AcE_{NOx}, in pounds; and, 3) specific NO_x emission rate(s) used to calculate the monthly quantity of AcE_{NOx}. In addition, the report must contain the total quantities of 1) AcE_{NOx}, in pounds, 2) AlE_{NOx}, in pounds, and, 3) ERC_{NOx}, in pounds, for the combustion turbine unit. The Permittee shall also report whether or not the combustion turbine unit was in compliance with 310 CMR 7.19. This submittal must be made for each calendar quarter by the thirtieth (30th) day of April, July, October, and January covering the previous calendar periods of January through March, April through June, July through September, and October through December, respectively. Each report submitted on January 30 of each calendar year, shall also contain: 1) the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERC_{NOx} that were necessary for compliance with 310 CMR 7.19 in the previous calendar year, and 2) the identity of the source from which ERC_{NOx} were obtained, including company name, emission unit and method of generation, date of generation, and the Transmittal Number of the Application for certification of ERC_{NOx}.
EU1, EU2, EU3, EU4, EU10	As required by 310 CMR 7.28(13)(a)(1), for units commencing operation prior to May 1, 2002, the AAR must submit quarterly reports for each calendar quarter beginning with: the earlier of the calendar quarter that includes the date of initial certification or, if the certification tests are not completed by May 1, 2002, the partial calendar quarter from May 1, 2002 through June 30, 2002. Data shall be recorded and reported from the earlier of the date and hour corresponding to the date and hour of certification or the first hour on May 1, 2002.
EU5, EU6, EU7, EU8	As required by 310 CMR 7.28(13)(a)(2), the AAR must submit quarterly reports for each calendar quarter beginning with: for a unit that commences operation on or after May 1, 2002, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour that the unit commenced operation.
	Report in accordance with 40 CFR Part 60, Subpart GG for the gas turbines and 40 CFR Part 60, Subpart Da for the supplemental duct firing HRSG burners, as applicable.
	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 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.
	In accordance with Approval MBR-99-COM-012, any future changes to the QA/QC program must be submitted in writing, and reviewed and approved in writing by MassDEP prior to implementation.
EU5, EU6, EU7, EU8	In accordance with Approval MBR-99-COM-012, 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.

Table 6	
EU#	REPORTING REQUIREMENTS
	In accordance with Approval MBR-99-COM-012, submit a quarterly report to MassDEP. The report shall be submitted by the 30th of the following month after the end of each quarter and shall contain at least the following information: a) The facility CEMS and COMS excess emission data, in a format acceptable to MassDEP. 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, malfunction, emergency, equipment cleaning, and upsets or failures associated with the emission control system or CEMS or COMS. ("Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures 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. "Emergency" 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.) c) A tabulation of periods of operation (dispatch) of the facility.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with 310 CMR 7.28(13)(b), the AAR for each budget unit using CEMS must submit to the Administrator all emissions and operating information for each calendar quarter of each year in accordance with the standards specified in 40 CFR Part 75 Subpart H and 40 CFR 75.64.
	In accordance with 310 CMR 7.28(13)(c)1., for units subject to an Acid Rain Emissions limitation, quarterly reports shall include all of the data and information required in 40 CFR Part 75 Subpart H for each NOx Budget unit (or group of units using a common stack) as well as information required in 40 CFR Part 75 Subpart G.
EU10	In accordance with 310 CMR 7.28(13)(c)2., for units not subject to an Acid Rain Emissions limitation, quarterly reports are only required to include all of the data and information required in 40 CFR Part 75 Subpart H for each NOx Budget unit (or group of units using a common stack).
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU10	The facility shall comply with all applicable reporting requirements contained in 40 CFR Part 60, 40 CFR Part 75, and 310 CMR 7.28.
	In accordance with the requirements of 310 CMR 7.28(13), NO_x emissions data must be reported pursuant to the requirements of 310 CMR 7.28(11)(a)6., 310 CMR 7.28(11)(a)7., and 310 CMR 7.28(11)(b).
	NO_x 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.
	In accordance with 310 CMR 7.28(13)(e), by October 15 of each year, any person who owns, leases, operates or controls a new or existing budget unit must report to MassDEP each facility's metered net electric and useful steam output for that year's control period. Net electric output must be reported in megawatt-hours, and steam output in million British Thermal Units (MMBTU). If data for steam output is not available, the person may report heat input providing useful steam output as a surrogate for steam output.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU10	In accordance with 310 CMR 7.28(15), for each control period, the AAR for the budget unit shall submit by November 30 of each year, an annual compliance certification report to MassDEP and the NATS Administrator. The compliance certification shall contain, at a minimum, the items listed in 310 CMR 7.28(15)(c)1 through 8.

Table 6

EU#	REPORTING REQUIREMENTS
	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 21days prior to the scheduled test date to the EPA as required by 40 CFR 75.61, to MassDEP's Lawrence office at MassDEP, Wall Experiment Station, 37 Shattuck Street, Lawrence, MA 01843-1398 Attn: Source Monitoring Section, and to MassDEP's 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.
EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, by January 30 of the year following the earliest applicable compliance date for the affected facility under 310 CMR 7.29(6)(c), and January 30 of each calendar year thereafter, the company representative responsible for compliance shall submit a compliance report to MassDEP demonstrating the facility's compliance status with the emission standards contained in 310 CMR 7.29(5)(a) and in an approved Emission Control Plan. The report shall demonstrate the facility's compliance status with applicable monthly emission rates for each month of the previous calendar year, and each of the twelve previous consecutive 12-month periods. The compliance report shall include all statements listed in 310 CMR 7.29(7)(b)4. If the ISO final settlement of actual electrical output is not available, the facility shall submit a compliance report based on provisional values of actual electrical output. Upon receiving certified ISO values of actual electrical output for all provisional months within the calendar year, the facility shall submit a revised compliance report within 30 days thereafter.
	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, MassDEP may verify the facility's compliance status by whatever means necessary, including but not limited to requiring the affected facility to submit information on actual electrical output of company generating units provided by the New England Independent System Operator (ISO), or any successor thereto.
	In accordance with Approval MBR-01-729-002 and 310 CMR 7.29, submit by January 15, April 15, July 15 and October 15 for the previous three months respectively, a 7.29 construction status report which identifies the construction activities which have occurred during the past three months, and those activities anticipated for the following three months, and progress toward achieving compliance with the implementation dates identified in 310 CMR 7.29(5)(a).
EU9A	Report in accordance with 40 CFR Part 60, Subpart Dc, as applicable.
EU9B	Report in accordance with 40 CFR Part 60, Subpart Db, as applicable.
EU12	In accordance with 310 CMR 7.02(8)(i)4., monthly log(s) and records established under 310 CMR 7.02(8)(i)3. shall be made available to MassDEP or its designee upon request. The owner or operator shall certify that the log is accurate and true in accordance with 310 CMR 7.01(2).In accordance with
	In accordance with 310 CMR 7.02(8)(i)5., the owner or operator shall notify MassDEP of the engine(s) coverage under 310 CMR 7.00 concurrent with the required submittal of the facility's Source Registration/Emission Statement Form pursuant to 310 CMR 7.12.
EU1, EU2, EU3, EU4, EU9B, EU10	In accordance with 310 CMR 7.19(13)(d)9., submit compliance records within ten (10) days of written request by MassDEP or EPA.
EU13, EU14, EU15, EU16	In accordance with 310 CMR 7.03(5), any construction, substantial reconstruction or alteration, as described in 310 CMR 7.03, at a facility subject to the reporting requirements of 310 CMR 7.12, shall be reported to MassDEP on the next required Source Registration/Emission Statement Form.

Table 6	
EU#	REPORTING REQUIREMENTS
Facility Wide	If and when MassDEP requests Emissions Compliance Testing (Stack Testing) to be conducted as per Approval MBR-99-COM-012: (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, (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 (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.
	In accordance with Approval MBR-05-ECP-002, submit the test results of any other testing or testing methodology required by MassDEP or EPA.
	In accordance with Approval MBR-99-COM-012, 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
	In accordance with Approval MBR-05-ECP-002 and Approval MBR-99-COM-012, 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.
	Submit a Source Registration/Emission Statement Form to MassDEP on an annual basis as required by 310 CMR 7.12.
	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).
	Submit by January 30 and July 30 for the previous six months respectively, a summary of all monitoring data and related supporting information to MassDEP as required by 310 CMR 7.00: Appendix C(10)(c).
	Submit Annual Compliance report to MassDEP and EPA by January 30 of each year and as required by General Condition 10 of this Permit.
	Promptly report to MassDEP all instances of deviations from Permit requirements by telephone or fax, within three days of discovery of such deviation, as provided in 310 CMR 7.00: Appendix C(10)(f) and General Condition 25.
	All required reports must be certified by a responsible official as provided in 310 CMR 7.00: Appendix C(10)(h).

C. GENERAL APPLICABLE REQUIREMENTS

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

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

Table 7	
REGULATION	DESCRIPTION
310 CMR 7.16:	Reduction of Single Occupant Commuter Vehicle Use
310 CMR 7.27	NO_x Allowance Program
42 U.S.C. 7401, §112(r)	Prevention of Accidental Releases

5. SPECIAL TERMS AND CONDITIONS

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

a) Per data as supplied through the Permittee's Operating Permit Application (MBR-95-OPP-036, Transmittal No. 108037), EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, EU9A, EU9B, EU10, EU11, and EU12 shall continue to emit products of combustion through stacks with the following parameters:

EMISSION UNIT	STACK HEIGHT (Feet)	STACK EXIT DIAMETER (Feet)	STACK MATERIAL
EU1	335	10.5	Refractory
EU2	335	10.5	Refractory
EU3	335	10.5	Refractory
EU4	500	12	Refractory
EU5, EU6 (1 Stack, 2 Flues)	305 (Each Flue)	20.5 (Each Flue)	Steel Flue Concrete Stack
EU7, EU8 (1 Stack, 2 Flues)	305 (Each Flue)	20.5 (Each Flue)	Steel Flue Concrete Stack
EU9A	35	3.5	Stainless Steel
EU9B	60	4.5	Steel
EU10	30	9.5 by 11.5 (Rectangular)	Metal
EU11 (2 Stacks)	136 (Each Stack)	1.5 (Each Stack)	Steel (Each Stack)
EU12	45	0.83	Steel

NA = Not Applicable

b) As stated within Approval MBR-85-COM-013, Approval MBR-89-IND-139, Approval MBR-94-COM-026, Approval MBR-05-ECP-002, Approval MBR-99-COM-012, Approval MBR-2000-COM-001, and Approval MBR-01-729-002, that 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, EU2, EU3, EU4, EU5, EU6, EU7, and EU8 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 Mystic Station on December 22, 1997, and renewed said permit on January 27, 2003. MassDEP will be incorporating future renewals of the Phase II Acid Rain Permit with Operating Permit Renewals.

Within 60 days of the end of each calendar year, the facility shall hold in its SO_2 allowance account at least one allowance for each ton of SO_2 emitted during the previous year. An allowance is a limited authorization to emit SO_2 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_2 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
	2004 to 2009
EU1	2,606
EU2	3,091
EU3	3,075
EU4	17,239
EU5	0
EU6	0
EU7	0
EU8	0

Within 60 days of the end of each calendar year the designated representative shall submit to MassDEP an annual compliance certification report pursuant to 40 CFR Part 72.9 Subpart I.

d) Noise (State Only Requirement)

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), which unreasonably interferes with the comfortable enjoyment of life and property or conduct of business. Facility personnel shall identify and evaluate all plant equipment that may cause a noise condition. Sources of noise include, but are not limited to: transformers, the air-cooled condensers, the heat recovery steam generators, the combustion turbines, main exhaust stacks, and building ventilation systems.

MassDEP Noise Policy 90-001 limits increases over the existing L_{90} ambient background level to 10 decibels, A-weighted (dBA). The L_{90} 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 facility complies with said Policy.

In accordance with Approval MBR-99-COM-012, the allowable noise levels generated from the operation of the facility are summarized below. Further, based on the noise frequency distribution, no combination of noise sources shall result in a "pure tone condition," as previously defined.

Allowable Noise Impacts +			
LOCATION	AMBIENT (L_{90},dBA)[1]	AMBIENT & PLANT (L_{90},dBA)	CHANGE (dBA)[2]
R-1 Mystic Street	55	57	+2
R-2 Admiral's Hill	50	50	0
R-3 Medford Street	50	51	+1
R-4 Maine Terrace/Benedict Street	47	47	0
PL-1 North Property Line	58	65	+7
PL-2 East Property Line (Northerly)	58	65	+7
PL-3 East Property Line (Southerly)	58	65	+7
PL-4 South Property Line at River	64	66	+2

+ Notes:

1. The lowest background levels observed during either

nighttime or daytime where the noise level is exceeded 90 percent of the time (L_{90}) 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_{90} 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.

e) State NOx Allowance Trading Program, 310 CMR 7.28

EU1, EU2, EU3, EU4, EU5, EU6, EU7, EU8, and EU10 are subject to the requirements of the NO_x Allowance Trading Program, 310 CMR 7.28. MassDEP issued NO_x Allowance Trading Program Emission Control Plan (ECP) Approvals for Mystic Station as follows:

EMISSION UNIT	APPROVAL NUMBER	PHASE I APPROVAL ISSUE DATE	PHASE II APPROVAL ISSUE DATE
EU1, EU2, EU3, EU4, EU10	MBR-01-728-006 (Transmittal No. W024232)	July 30, 2002	December 10, 2003
EU5, EU6, EU7, EU8	MBR-01-728-007 (Transmittal No. W024212)	July 30, 2002	December 10, 2003

NOx Allowance use and transfer must comply with 310 CMR 7.28(10).

In accordance with 310 CMR 7.28(14), each year by November 30, for each budget unit, the total number of banked or current year allowances in its compliance or overdraft account must equal or exceed the NOx emissions from the budget unit in the current control period.

Each budget unit shall meter electric output in accordance with the approved monitoring methodology contained in Table II of the ECP Approval MBR-01-728-006 (Transmittal No. W024232) and Approval MBR-01-728-007 (Transmittal No. W024212).

In the case where billing meters are used to determine output, no QA/QC activities beyond those already performed are required. To qualify as a billing meter, the measurement device must be used to measure electric or thermal output for commercial billing under a contract. The facility selling the electric or thermal output must have different owners from the owners of the party purchasing the electric or thermal output. Any electric or thermal output values that the facility reports must be the same as the values used in billing for the output.

In the case where non-billing meters are used to determine output, if the facility decides to adopt a system approach to accuracy then a system accuracy of 10.0% must be achieved. If testing an output measurement system shows that the output readings are not accurate to 10.0% or less, then the measurement equipment must be retested or replaced, and meet that requirement. If the facility decides to adopt a component approach to accuracy, then a component accuracy of 3.0% must be achieved. If testing a piece of output measurement equipment shows that the output readings are not accurate to 3.0% or less of the full scale, then the measurement equipment must be retested or replaced, and meet that requirement. When a non-billing system fails to meet the 10% or 3% requirement, data should be considered invalid, prospectively, for purposes of determining allocations. Data remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test. The invalid data must be omitted and either zero or an output value that is likely to be lower than a measured value must be reported.

Output measurement equipment must be tested for accuracy or

recalibrated at least once every two years, in accordance with applicable consensus or NIST traceable standards, unless a standard allows for less frequent calibrations or accuracy tests.

f) In accordance with Approval MBR-01-729-002, MassDEP may verify compliance of 310 CMR 7.29(5) by whatever means necessary, including but not limited to: inspection of a unit's operating records; requiring the facility to submit information on actual electrical output of company generating units provided to that person by the New England Independent System Operator, or any successor thereto; testing emission monitoring devices; and, requiring the facility to conduct emissions testing under the supervision of MassDEP.

g) In accordance with Approval MBR-01-729-002, MassDEP is not approving or denying any off-site or non-contemporaneous proposed CO_2 reduction measures at this time. 310 CMR 7.29(5)(a)5.c. and d. provide that compliance with the CO_2 emission limitations may be demonstrated by using offsite reductions or sequestration in addition to onsite reductions, as long as certain established conditions are met. However, while there is a provision for using early reductions of SO_2 to meet the SO_2 emissions limit in 310 CMR 7.29(5)(a)2.a., there is no similar regulatory provision for use of early reductions of CO_2 for compliance with 310 CMR7.29(5)(a)5. MassDEP is in the process of developing provisions for the quantification and certification of Greenhouse Gas (GHG) reductions for use in demonstrating compliance with the CO_2 emission limitations contained in 310 CMR 7.29. MassDEP will review and approve or deny proposals for off-site, sequestration, or non-contemporaneous reductions (i.e. early on-site reductions) of CO_2 or other GHG after adoption of amendments to 310 CMR 7.00: Appendix B, and other regulatory sections, if necessary.

h) MassDEP and the Applicant have entered into a memorandum of understanding (MOU) concerning the use of zero ammonia (NH_3) technology (ZAT) for the control of NO_x from EU5, EU6, EU7, and EU8. A copy of the MOU is included in Approval MBR-99-COM-012. For the first five years of operation of the facility, there shall be an interim emission rate for NH_3 of 2.0 ppmvd @ 15% O_2 one-hour block average. Pursuant to the MOU, the emission rate for NH_3 after the first five years of operation shall be zero unless the interim 2.0 ppm NH_3 limit is extended by MassDEP. During the five-year period it will be determined whether a ZAT must be installed in the facility. The MOU provides a methodology for making the determination, including a consideration of availability, reliability, comparable costs and the impact on other Permits and Approvals. A determination of the comparative costs of retrofitting the facility to a ZAT will be made by an independent consultant.

i) In accordance with Approval MBR-99-COM-012, the Permittee shall ensure that the SCR control equipment for each turbine generator EU5, EU6, EU7, and EU8 is operational whenever the turbine exhaust temperature attains 558 $^{\circ}$F at the SCR unit. The 558 $^{\circ}$F temperature point corresponds approximately to 50% combustion turbine power.

j) In accordance with Approval MBR-99-COM-012, 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.

k) In accordance with Approval MBR-99-COM-012, the roadways servicing the facility shall be paved and maintained free of deposits that could result in excessive dust emissions.

l) In accordance with Approval MBR-99-COM-012, 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.

m) In accordance with Approval MBR-99-COM-012, the Permittee shall take

all reasonable actions to respond to complaints received through the complaint log available to the general public by telephone, 24 hours per day, 7 days per week.

n) In accordance with Approval MBR-99-COM-012, 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 affirming that they have read and understand the approved standard operating and standard maintenance procedures. The Permittee shall give refresher training to facility personnel at least once annually.

o) In accordance with 310 CMR 7.05(1)(b)2.c., the Permittee shall have available for conversion, in EU1, EU2, EU3, and EU4, within three hours of any notice from MassDEP, a three day supply of fuel with a lower sulfur content, as specified by MassDEP, which shall be utilized during periods of adverse meteorological conditions when directed by MassDEP. The Permittee may opt to remove the affected units from service for the duration of the emergency. In accordance with 310 CMR 7.05(1)(b)4., approval granted under the provisions of 310 CMR 7.05(1)(b)2. may be revoked by MassDEP for cause or when in its opinion revocation is necessary to prevent or abate a condition of air pollution.

p) In accordance with Temporary Approval MBR-2000-COM-001 as modified on April 29, 2005, this Approval regarding the operation of the temporary auxiliary boiler EU9A shall expire upon combustion of its lifetime fuel allotment of 545,400,000 cubic feet of natural gas or whenever the permanent auxiliary boiler EU9B begins to reliably supply steam to the facility, whichever is sooner. The temporary auxiliary boiler EU9A shall not be operated upon Approval expiration, and shall be disconnected and removed from the site as soon as practical after Approval expiration or when the permanent auxiliary boiler EU9B begins to reliably supply steam to the facility, whichever is sooner.

q) In accordance with Approval MBR-99-COM-012, MassDEP shall incorporate the maximum allowable emission rate limits (lb/hr, lb/MMBTU, ppmvd) for NO_x, CO, VOC, SO_2, PM/PM_{10}, and NH_3, including Opacity limits, for "hot start", "warm start", "cold start", and shut down periods into the Final Approval after review of the compliance test data for these periods of time, and such limits shall be considered enforceable.

r) In accordance with 310 CMR 7.19(8)(b) and Approval MBR-94-COM-026, EU12 shall be utilized as an emergency standby engine only. In accordance with 310 CMR 7.19(8)(b)2., EU12 shall not be operated as a load shaving unit, peaking power production unit, or standby engine in an energy assistance program.

s) The Permittee is subject to, and has stated in their Operating Permit Application (MBR-95-OPP-036, Transmittal No. 108037), 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.

t) The facility is major for Hazardous Air Pollutants and therefore subject to 40 CFR Part 63: National Emission Standards For Hazardous Air Pollutants For Source Categories. Compliance with all applicable provisions therein is required.

u) In accordance with Approval MBR-05-ECP-002, EU10 shall comply with an allowable NOx emission limitation (AlE_{NOx}), in pounds, based on the equation given below:

$$AlE_{NOx} = [(A_{\#2\ OIL}) \times (B_{\#2\ OIL})]$$

where:

$A_{\#2\ OIL}$ = allowable NOx emission rate in pounds/MMBTU when burning No. 2 Fuel Oil
$B_{\#2\ OIL}$ = heat input in MMBTU of EU10 when burning No. 2 Fuel Oil

$A_{\#2\ OIL}$ in the above equation is calculated per Regulation 310 CMR 7.19(14)(c) as follows:

For No. 2 Oil:
$A_{\#2\ OIL}$ = (100 ppmvd @ 15% O_2) x (0.00389) = 0.389 pounds/MMBTU

Therefore, the equation to determine the allowable NOx emission limitation (ALE_{NOx}) for EU10 is reduced to:

$AlE_{NOx} = [(0.389) \times (B_{\#2\ OIL})]$

The actual NOx emissions (AcE_{NOx}), in pounds, for EU10 shall be calculated according to the following equation:

$AcE_{NOx} = [(Ac_{\#2\ OIL} \times B_{\#2\ OIL})]$

where:

$Ac_{\#2\ OIL}$ = unit specific NOx emission rate of EU10 in pounds/MMBTU as determined from stack testing when burning No. 2 Fuel Oil
$B_{\#2\ OIL}$ = heat input in MMBTU of EU10 when burning No. 2 Fuel Oil

Final determination of the amount of ERC_{NOx} necessary for EU10 to comply with 310 CMR 7.19 shall be calculated utilizing a compliance assurance multiplier of 1.10 consistent with 310 CMR 7.19(13)(a)3.b. and according to the following formula:

$ERC_{NOx} = (AcE_{NOx} - AlE_{NOx}) \times 1.10$

where:

ERC_{NOx} = federally enforceable NOx Emission Reduction Credits in pounds (greater than or equal to zero) certified by MassDEP under 310 CMR 7.00: Appendix B(3)

The amount of ERC_{NOx} calculated by the above formula shall be rounded to the nearest whole number. The NOx emissions from EU10 shall be averaged over a 24-hour period or daily.

Mystic Station shall comply with 310 CMR 7.00: Appendix B(3)(e) regarding the withdrawal, transfer, and use of ERC_{NOx}. In accordance with 310 CMR 7.00: Appendix B(3)(e)2., Mystic Station shall obtain an amount of credit equal to five (5) percent more than the amount needed for compliance calculation. Therefore, the amount of ERC_{NOx} obtained shall be calculated according to the following formula and rounded to the nearest whole number:

$ERC_{NOx} = (AcE_{NOx} - AlE_{NOx})(1.10)(1.05)$

Mystic Station shall calculate the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERC_{NOx} that are necessary for compliance with 310 CMR 7.19, and obtain and use (or retire) ERC_{NOx} in accordance with the provisions of 310 CMR 7.00: Appendix B(3)(e)8. In accordance with 310 CMR 7.00: Appendix B(3)(e)8., ERC_{NOx} generated during the ozone control period of May 1 through September 30 can be used for compliance at any time during the year. However, ERC_{NOx} generated during the non-ozone control period of October 1 through April 30 shall only be used for compliance in the same season as generated (October 1 through April 30).

6. ALTERNATIVE OPERATING SCENARIOS

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

7. EMISSIONS TRADING

a) Intra-facility emissions 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_2 Allowance System;
310 CMR 7.22 - SO_2 Emissions Reductions for the Purpose of Reducing Acid Rain;
310 CMR 7.28 – NOx Allowance Trading Program;
310 CMR 7.29 – Emissions Standards for Power Plants;
310 CMR 7.00, Appendix A - Emission Offsets; and
310 CMR 7.00, Appendix B - Emission Reduction Credits.

The Permittee has requested intra-facility emissions trading as provided for in Approval MBR-05-ECP-002 and Sections 4 and 5 of this Operating Permit.

Pursuant to 310 CMR 7.00: Appendix C(7)(b), emissions trades, provided for in this Permit, may be implemented provided the Permittee notifies EPA and MassDEP 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 MassDEP pursuant to 310 CMR 7.00: Appendix B.

b) Inter-facility emissions 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_2 Allowance System;
310 CMR 7.22 - SO_2 Emissions Reductions for the Purpose of Reducing Acid Rain;
310 CMR 7.28 – NOx Allowance Trading Program;
310 CMR 7.29 – Emissions Standards for Power Plants;
310 CMR 7.00, Appendix A - Emission Offsets; and
310 CMR 7.00, Appendix B - Emission Reduction Credits.

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

b) The Permittee shall be in full compliance with the applicable requirements under 310 CMR 7.29 and Approval MBR-01-729-002 (Transmittal No. W025059) in accordance with the dates below:

COMPLIANCE PATH +		
POLLUTANT	STANDARD	DATE
NO_x SO_2	310 CMR 7.29(5)(a)1.a. 310 CMR 7.29(5)(a)2.a.	October 1, 2006
NO_x SO_2	310 CMR 7.29(5)(a)1.b. 310 CMR 7.29(5)(a)2.b.	October 1, 2008
CO_2	310 CMR 7.29(5)(a)5.a.	Calendar Year 2006
CO_2	310 CMR 7.29(5)(a)5.b.	Calendar Year 2008

+ The facility received a Conditional Comprehensive Plan Approval (Application MBR-99-COM-012, Transmittal W004632) pursuant to 310 CMR 7.02 on January 25, 2000 for repowering. Details of the compliance schedule/milestones are described in Section H of the Application (MBR-01-729-002, Transmittal No. W025059).

c) The Permittee shall comply with all requirements of EPA's Compliance Order and Reporting Requirement (Docket No. CAA-02-0011) issued on March 5, 2002, and Notice of Violation and Reporting Requirement (Docket No. CAA-01-0013) issued on June 1, 2001.

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."

MassDEP has made available to the Permittee via MassDEP's web site, http://www.mass.gov/dep/air/approvals/aqforms.htm, an "Operating Permit Reporting Kit". The "Operating Permit Reporting Kit" contains instructions, and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification.

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, United States 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 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 Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit Renewal Application by MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

12. PERMIT SHIELD

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

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

(b) MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Part D.

(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. §7401, §408(a); or

iii. 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, 7.02(8)(i), 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 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 five (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 that 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, as per 310 CMR 7.00: Appendix C(3)(g)12.:

(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.

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[1] emission limitations specified in this Permit as a result of an emergency[2]. 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.

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 or fax, 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.

[1] 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.

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

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

Deviations that were reported by telephone or fax within 3 days of discovery, said deviations shall also be submitted in writing to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations that 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 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)(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.

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 (MassDEP)
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.