



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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FINAL AIR QUALITY OPERATING PERMIT

(Administrative Amendment of MBR-95-OPP-025A, Transmittal X235501)

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"]:

Dominion Energy Salem Harbor, LLC
24 Fort Avenue
Salem, Massachusetts 01970

INFORMATION RELIED UPON:

Application No. MBR-95-OPP-025A2
Transmittal No. X236090

FACILITY LOCATION:

Salem Harbor Station
24 Fort Avenue
Salem, Massachusetts 01970

FACILITY IDENTIFYING NUMBERS:

AQ ID: 1190194
FMF FAC NO.: 404157
FMF RO NO.: 404890

NATURE OF BUSINESS:

Electrical Power Generation

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM:

(NAICS): 221112

RESPONSIBLE OFFICIAL:

Name: Lamont W. Beaudette

FACILITY CONTACT PERSON:

Name: Lamont W. Beaudette
Title: Station Director
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This Operating Permit shall expire on December 14, 2014.

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

January 13, 2011
Date

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SPECIAL CONDITIONS FOR OPERATING PERMIT

1. PERMITTED ACTIVITIES

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

DESCRIPTION OF FACILITY AND OPERATIONS

Dominion Energy Salem Harbor, LLC operates an electric power generation facility, Salem Harbor Station, located at 24 Fort Avenue in Salem, Massachusetts. The facility produces electricity by operating four (4) "large" boilers, designated as Emission Units (EU) 1, 2, 3, and 4. Salem Harbor Station's four (4) boilers are rated at 954, 966, 1,696, and 4,800 million British Thermal Units of heat energy input capacity per hour, respectively. Coal is the primary fuel combusted in EU1, EU2, and EU3 while No. 6 Fuel Oil is the primary fuel of use in EU4. Each boiler is subject to the requirements of Reasonably Available Control Technology (RACT) for Sources of Nitrogen Oxides (310 CMR 7.19). EU1, EU2, EU3, and EU4 are Budget Units under the Nitrogen Oxides Allowance Trading Program (310 CMR 7.28) and the Carbon Dioxide Budget Trading Program (310 CMR 7.70), Clean Air Interstate Rule Nitrogen Oxides Ozone Season Units under the Massachusetts Clean Air Interstate Rule (310 CMR 7.32), as well as Phase II Units subject to the requirements of the Federal Acid Rain Program (40 CFR Part 72). Salem Harbor Station is also an affected facility subject to the requirements of 310 CMR 7.29, Emission Standards for Power Plants.

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)
		(MMBtu/HR)	MW (NET) (1)	
EU1	Babcock & Wilcox Model No. RB103 Water Tube Boiler	954	84	Low NO _x Burners (PCD1) Selective Non-Catalytic Reduction (PCD2) Electrostatic Precipitator (PCD3)
EU2	Babcock & Wilcox Model No. RB103 Water Tube Boiler	966	81	Selective Non-Catalytic Reduction (PCD4) Electrostatic Precipitator (PCD5)
EU3	Babcock & Wilcox Model No. RB284 Water Tube Boiler	1,696	150	Over-Fire Air (PCD6) Low NO _x Burners (PCD7) Selective Non-Catalytic Reduction (PCD8) Electrostatic Precipitator (PCD9)

Table 1				
EU#	DESCRIPTION OF EMISSION UNIT	EU DESIGN CAPACITY		POLLUTION CONTROL DEVICE (PCD)
		(MMBtu/HR)	MW (NET) (1)	
EU4	Riley Stoker Model No. 1SR Water Tube Boiler	4,800	440	Low NO _x Burners (PCD10) Electrostatic Precipitator (PCD11)
EU5	Coal Storage Pile	179,500 tons		Water Sprays, Dust Suppressant, Surface Sealant (PCD12)

Table 1 Notes:

1 The MW (NET) values are nominal values and do not reflect a regulatory limit.

Table 1 Key:

EU# = Emission Unit Number
 MMBtu/HR = fuel heat input in million British thermal units per hour
 MW (NET) = net electrical output in Megawatts
 NO_x = Nitrogen Oxides

3. IDENTIFICATION OF EXEMPT ACTIVITIES

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

Table 2	
DESCRIPTION OF CURRENT EXEMPT ACTIVITIES	REASON
The list of current exempt activities is contained in the Operating Permit Application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to MassDEP's Regional Office. Emissions from these activities shall be reported to MassDEP on the annual Source Registration/Emission Statement Form, pursuant to 310 CMR 7.12.	310 CMR 7.00: Appendix C(5) (h)

4. APPLICABLE REQUIREMENTS

A. EMISSION LIMITS AND RESTRICTIONS

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

Table 3						
EU#	RESTRICTION	FUEL (4) (6)	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER	
EU1	≤ 954 MMBtu/hr	All Fuels	NO _x	≤ 1,379 tpy	MBR-95-COM-017 and MBR-94-COM-011	
			CO	≤ 694 tpy		
EU2	≤ 966 MMBtu/hr		NO _x	≤ 1,396 tpy		
			CO	≤ 702 tpy		
EU3	≤ 1,696 MMBtu/hr		NO _x	≤ 2,451 tpy		
			CO	≤ 1,233 tpy		
EU1, EU2, EU3	NA	Coal (16)	NO _x	≤ 0.33 lb/MMBtu (2)	MBR-95-COM-017 and MBR-94-COM-011	
		No. 6 Fuel Oil		≤ 0.28 lb/MMBtu (2)	310 CMR 7.19(4)(a)	
		Cofiring Fuels		≤ PS _{NOx} (1)(2)	310 CMR 7.19(15)	
		All Fuels	CO	≤ 200 ppm by volume, dry basis at 3% O ₂ (2)(15)	310 CMR 7.19(4)(f)	
				PM	≤ 0.12 lb/MMBtu	310 CMR 7.02(8)(d) Table 3 and 4
				Opacity	< 20 percent, except 20 to < 40 percent for ≤ 6 minutes during any one hour	MBR-95-COM-017 and MBR-94-COM-011
		Coal	S in Fuel	≤ 2.31 lb/MMBtu (2)	MBR-82-COM-017	
				≤ 1.21 lb/MMBtu	MBR-95-COM-017 and MBR-94-COM-011	
		Coal	SO ₂	≤ 4.62 lb/MMBtu (2) ≤ 2.42 lb/MMBtu per 30 day rolling period	MBR-82-COM-017	
				≤ 2.42 lb/MMBtu	MBR-95-COM-017 and MBR-94-COM-011	
		Coal	Ash in Fuel	≤ 12 percent by weight, dry basis	MBR-82-COM-017	
		Coal or Ash Re-burn	Hg	≤ 21.2 pounds per calendar year (8)(17)	310 CMR 7.29(5)(a)3.c.	
				≥ 85% removal efficiency calculated on a rolling 12 month basis (10); or, ≤ 0.0075 lbs/GWh calculated on a rolling 12 month basis (11)(17)	310 CMR 7.29(5)(a)3.e.i. or 310 CMR 7.29(5)(a)3.e.ii.	
				Effective October 1, 2012, ≥ 95% removal efficiency calculated on a rolling 12 month basis (10); or, ≤ 0.0025 lbs/GWh calculated on a rolling 12 month basis (11)(17)	310 CMR 7.29(5)(a)3.f.i. or 310 CMR 7.29(5)(a)3.f.ii.	
EU4	≤ 4,800 MMBtu/hr	No. 6 Fuel Oil	NO _x	≤ 0.28 lb/MMBtu (2)	310 CMR 7.19(4)(a)	
				≤ 5,887 tpy	MBR-94-COM-012	
			CO	≤ 130 ppm by volume, dry basis at 3% O ₂ (2)(15)		
≤ 2,269 tpy						

Table 3

EU#	RESTRICTION	FUEL (4) (6)	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER		
EU4	≤ 4,800 MMBtu/hr	No. 6 Fuel Oil	PM	≤ 0.04 lb/MMBtu	MBR-91-COM-016 and MBR-91-COM-029		
			Opacity	< 15 percent, except 15 to < 40 percent for ≤ 6 minutes during any one hour	MBR-91-COM-029		
		No. 6 Fuel Oil	S in Fuel		≤ 1.21 lb/MMBtu	MBR-91-COM-016 and MBR-91-COM-029	
				No. 6 Fuel Oil (5)			≤ 0.55 lb/MMBtu
				No. 2 Fuel Oil (5)			≤ 0.17 lb/MMBtu
		No. 6 Fuel Oil	SO ₂		≤ 2.42 lb/MMBtu		
				No. 6 Fuel Oil			≤ 1.10 lb/MMBtu
				No. 2 Fuel Oil			≤ 0.34 lb/MMBtu
EU1, EU2, EU3, EU4	NA	All Fuels	NO _x	See "Special Terms and Conditions", Section 5(e)	310 CMR 7.28		
				See "Special Terms and Conditions", Section 5(f)	310 CMR 7.32		
				See "Special Terms and Conditions", Section 5(g)	40 CFR Part 76		
				≤ 1.5 lbs/MWh calculated over any consecutive 12 month period, recalculated monthly (17)	310 CMR 7.29(5) (a)1.a.		
				≤ 3.0 lbs/MWh calculated over any individual calendar month (17)	310 CMR 7.29(5) (a)1.b.		
			SO ₂	≤ 6.0 lbs/MWh calculated over any consecutive 12 month period, recalculated monthly (12) (17)	310 CMR 7.29(5) (a)2.a.		
				≤ 3.0 lbs/MWh calculated over any consecutive 12 month period, recalculated monthly (12) (13) (17)	310 CMR 7.29(5) (a)2.b.i.		
				≤ 6.0 lbs/MWh calculated over any individual calendar month (12) (13) (17)	310 CMR 7.29(5) (a)2.b.ii.		
			SO ₂	See "Special Terms and Conditions", Section 5(g)	40 CFR Part 73		
			CO ₂	≤ 4,286,053 tons in the calendar year (9) (17) (18)	310 CMR 7.29(5) (a)5.a.		
				≤ 1800 lbs/MWh in the calendar year (17) (19)	310 CMR 7.29(5) (a)5.b.		
				See "Special Terms and Conditions", Section 5(h)	310 CMR 7.70		
			CO	Reserved (14)	310 CMR 7.29(5) (a)4.		
			PM 2.5	Reserved (14)	310 CMR 7.29(5) (a)6.		
			System-Wide	SO ₂	≤ 1.2 lb/MMBtu (3)	310 CMR 7.22(1)	
Facility-Wide (Except EU1, EU2, EU3, EU4)	Smoke	< No. 1 of Chart (7), except No. 1 to < No. 2 of Chart for ≤ 6 minutes during any one hour	310 CMR 7.06(1) (a)				

Table 3					
EU#	RESTRICTION	FUEL (4) (6)	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
Facility-Wide (Except EU1, EU2, EU3, EU4)	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

$$PS_{NOx} = \frac{0.33 \times (HI_1) + 0.28 \times (HI_2)}{(HI_1 + HI_2)}$$

$$PS_{NOx} = \text{prorated } NO_x \text{ emission limit when burning different fuels, lb/MMBtu}$$

$$HI_1 = \text{heat input for Coal, MMBtu}$$

$$HI_2 = \text{heat input for No. 6 Fuel Oil, MMBtu}$$

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.
- 2

Compliance with emission limit(s)/standard(s) shall be based on a calendar day averaging time.
- 3

In accordance with 310 CMR 7.22(3)(b) and Approval MBR-90-COM-079, compliance is based on averaging the emissions from the Permittee's Salem Harbor Station (EU1, EU2, EU3, and EU4) and Brayton Point Station (EU1, EU2, EU3, and EU4) facilities and qualified Demand Side Management (DSM) credits utilizing a one (1) calendar year averaging time. The provisions of 310 CMR 7.22 are State-Only Requirements.
- 4

In accordance with the combined Approvals MBR-95-COM-017 and MBR-94-COM-011 and Approval MBR-84-COM-089, EU1, EU2, EU3, and EU4 are approved to burn Used Oil Fuel provided that:

 - the Permittee adheres to all emission limits for the EU as given in Table 3; and,
 - the Permittee abides by all conditions, whichever is most stringent, as stated in the Plan Approval(s), Operating Permit, and the Air Quality (310 CMR 7.05) and Hazardous Waste (310 CMR 30.00) Regulations concerning the handling, recycling, and burning of Used Oil Fuel (State-Only Requirement).
- 5

In accordance with Approval MBR-91-COM-016, EU4 shall start-up utilizing No. 2 Fuel Oil having a maximum sulfur content of 0.17 lb/MMBtu heat release potential for the igniters and No. 6 Fuel Oil having a maximum sulfur content of 0.55 lb/MMBtu heat release potential for the main burners.
- 6

In accordance with the combined Approvals MBR-95-COM-017/MBR-94-COM-011, supplemental fuels limited to Oil Flyash, High Carbon Coal Flyash, and Used Oil Fuel can be co-fired with any combination of Coal and No. 6 Fuel Oil in EU1, EU2, and EU3 provided that the Permittee adheres to all emission limits as given in Table 3.
- 7

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.
- 8

In accordance with 310 CMR 7.29(5)(a)3.c., the Hg emission limit is based on the average annual emissions calculated using the results of the stack tests required in 310 CMR 7.29(5)(a)3.d.ii.. Total annual Hg emissions

equal the total emissions from combustion of coal and re-burn of ash, where such ash was produced by the combustion of fossil fuel or ash at the facility. In accordance with 310 CMR 7.29(2), total Hg means the sum of particulate-bound and vapor-phase (elemental and oxidized) Hg in combustion gases or emitted to the atmosphere.

- 9 In accordance with 310 CMR 7.29(5)(a)5.a., the CO₂ emission limit is based on historical actual emissions as defined in 310 CMR 7.29(2).
- 10 In accordance with 310 CMR 7.29(5)(a)3.e.i. and 310 CMR 7.29(5)(a)3.f.i., the Hg removal efficiency based on a Hg monitoring system shall be calculated based on the average historic Hg inlet emissions determined under 310 CMR 7.29(5)(a)3.d.ii. using the methodology approved by MassDEP in the monitoring plan required under 310 CMR 7.29(5)(a)3.g..
- 11 In accordance with 310 CMR 7.29(5)(a)3.e.ii. and 310 CMR 7.29(5)(a)3.f.ii., the Hg emission rate based on a Hg monitoring system shall be calculated using the Hg mass emissions methodology approved by MassDEP in the monitoring plan required under 310 CMR 7.29(5)(a)3.g..
- 12 In accordance with 310 CMR 7.29(5)(b)2., compliance with the SO₂ emission standards in 310 CMR 7.29(5)(a)2. may be demonstrated by using SO₂ reductions at the affected facility below historical actual emissions which were made after May 11, 2001, and prior to the earliest applicable date set in 310 CMR 7.29(6). The total amount of tons produced through early reductions each year is calculated by multiplying the facility's net electrical output for that year times (the historical actual emission rate minus that year's actual emission rate in lbs/MWh) divided by 2000. The amount of early reductions, with supporting information, shall be provided to MassDEP prior to use for compliance with 310 CMR 7.29(5)(a)2.a.. Each ton of reduction may be used, once, to offset one ton of excess emissions from the facility. Excess emissions are any emissions above a level equal to the net electrical output of the facility times the applicable emission standard in 310 CMR 7.29(5)(a)2..
- 13 In accordance with 310 CMR 7.29(5)(b)3., compliance with the SO₂ emission standards in 310 CMR 7.29(5)(a)2.b. may be demonstrated by using SO₂ allowances created pursuant to 40 CFR Part 72 (the Federal Acid Rain Program). Three allowances shall be used to offset each ton of excess emissions above the emission standard. Such SO₂ allowances shall be in addition to those allowances used by the facility to comply with the requirements of 40 CFR Part 72, and shall be transferred to MassDEP and retired for the benefit of the environment.
- 14 MassDEP has reserved these areas in the regulations for further development.
- 15 In accordance with the current Standard Operating and Maintenance Procedures, compliance with the EU1, EU2, EU3 and EU4 CO limit is determined in the following manner:

Since the Continuous Emissions Monitoring Systems (CEMS) do not measure CO ppm dry, but rather CO ppm wet, a conversion shall be made to determine compliance. The following equation converts the CO limit in Table 3 from ppm to lbs/MMBtu, which is then compared to the United States Environmental Protection Agency (EPA) certified CEMS value, independent of moisture.

$$E = K \text{ Cd Fd } [20.9 / (20.9 - \%O_2)]$$

where:

- E = CO Emission Rate (lb/MMBtu)
K = Standard = 7.25×10^{-8} lb/dscf/ppm CO
NOTE: $K = (2.59 \times 10^{-9} \text{ lb/dscf/ppm any gas}) \times (\text{MW of gas})$ where,
MW of gas = molecular weight of CO = 28
Cd = CO limit from Table 3, ppmvd
Fd = Fuel Factor for Bituminous Coal = 9780 dscf of flue gas/MMBtu;
Fuel Factor for Fuel Oil = 9190 dscf of flue gas/MMBtu

$$\%O_2 = 3\% \text{ (CO limit specified at } 3\% O_2\text{)}$$

EU1, EU2, EU3

$$E = \frac{(7.25 \times 10^{-8}) (200) (9780) [20.9 / (20.9 - 3.0)]}{0.166 \text{ lb/MMBtu}}$$

EU4

$$E = \frac{(7.25 \times 10^{-8}) (130) (9190) [20.9 / (20.9 - 3.0)]}{0.101 \text{ lb/MMBtu}}$$

NOTE: EPA certified CEMS continuously record and display CO in lb/MMBtu.

- 16 In accordance with MassDEP's Amended Administrative Consent Order (ACO-NE-03-7001-AMEND#1), the Permittee shall purchase and combust low-E coal effective May 26, 2005.
- 17 In accordance with 310 CMR 7.29(5)(b)1., compliance with the emission standards in 310 CMR 7.29(5)(a) may be demonstrated by dividing the total emissions of each pollutant by the total net electrical output from all electric generating units subject to 40 CFR Part 72 located at the affected facility as of May 11, 2001 or repowered at the affected facility after May 11, 2001. For demonstrating compliance with the Hg emissions standards in 310 CMR 7.29(5)(a)3., the person who owns, leases, operates or controls an affected facility shall include in the calculation only units that fire solid fossil fuel or ash, or that repowered a unit that fired solid fossil fuel or ash.
- 18 In accordance with MassDEP's Administrative Consent Order (ACO-NE-03-7001), the date for compliance with the CO₂ requirements found at 310 CMR 7.29(5)(a)5.a. shall be October 1, 2006. In accordance with 310 CMR 7.29(5)(a)5.c., compliance with 310 CMR 7.29(5)(a)5.a. may be demonstrated by using emission reductions, avoided emissions or sequestered emissions verified under 310 CMR 7.00: Appendix B(7) to offset emissions above the historical actual emissions, provided MassDEP determines such emission reductions, avoided emissions or sequestered emissions are real, additional, verifiable, permanent, and enforceable as defined in 310 CMR 7.00: Appendix B(7) or by using the GHG Expendable Trust under the conditions specified in 310 CMR 7.00: Appendix B(7)(d)5. The CO₂ emission standard under 310 CMR 7.29(5)(a)5.a. shall not apply to the emissions of CO₂ that occur after December 31, 2008.
- 19 In accordance with MassDEP's Administrative Consent Order (ACO-NE-03-7001), the date for compliance with the CO₂ requirements found at 310 CMR 7.29(5)(a)5.b. shall be October 1, 2008. In accordance with 310 CMR 7.29(5)(a)5.d., compliance with 310 CMR 7.29(5)(a)5.b. may be demonstrated by using emission reductions, avoided emissions or sequestered emissions verified under 310 CMR 7.00: Appendix B(7) to offset excess emissions, provided MassDEP determines such emission reductions, avoided emissions or sequestered emissions are real, additional, verifiable, permanent, and enforceable as defined in 310 CMR 7.00: Appendix B(7) or by using the GHG Expendable Trust under the conditions specified in 310 CMR 7.00: Appendix B(7)(d)5. Excess emissions are any emissions above the net electrical output of the facility times 1,800 lbs/MWh. The CO₂ emission standard under 310 CMR 7.29(5)(a)5.b. shall not apply to the emissions of CO₂ that occur after December 31, 2008.

Table 3 Key:

EU# = Emission Unit Number

% = Percent

tpy = tons per year

ppm = parts per million

MMBtu/hr = million British thermal units per hour

lb/MMBtu = pounds per million British thermal units

lbs/MWh = pounds per Megawatt-hour of net electrical output

lbs/GWh = pounds per Gigawatt-hour of net electrical output

S = Sulfur

NO_x = Nitrogen Oxides
 CO = Carbon Monoxide
 PM = Particulate Matter
 PM_{2.5} = Fine Particulate Matter
 SO₂ = Sulfur Dioxide
 Hg = Mercury
 CO₂ = Carbon Dioxide
 O₂ = Oxygen
 < = Less than
 ≤ = Less than or equal to
 > = greater than
 ≥ = greater than or equal to
 NA = Not Applicable

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	<p>1. In accordance with 310 CMR 7.14(2) and 310 CMR 7.19(13)(a)1., 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.</p> <p>2. 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, NO_x emission rate and NO_x mass emissions pursuant to the requirements of 40 CFR Part 75, Subpart H by May 1, 2002.</p> <p>3. 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.</p> <p>4. 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.</p> <p>5. In accordance with 310 CMR 7.28(11)(a)(6), NO_x emissions data must be reported to the NO_x Emissions Tracking System (NETS) in accordance with 310 CMR 7.28(13).</p> <p>6. 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.</p>

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2, EU3, EU4	7. 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.
	8. In accordance with 310 CMR 7.19(13)(a)1., 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.
	9. In accordance with 310 CMR 7.14(2) and the Acid Rain Program 40 CFR Part 72, monitor SO ₂ emissions with CEMS. The SO ₂ 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.
	10. In accordance with the Acid Rain Program 40 CFR Part 72, monitor flue gas volumetric flow with flow monitoring systems pursuant to 40 CFR Part 75 and use the procedures contained therein to gather and analyze data, provide quality assurance and quality control.
	11. In accordance with Approval MBR-90-COM-079, as revised on March 4, 1996, compliance with the Massachusetts Acid Rain Law 310 CMR 7.22 shall be demonstrated through monitoring of 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 and SO ₂ emissions shall be monitored with CEMS that meet the requirements of 40 CFR Part 75.
	12. In accordance with 310 CMR 7.14(2) and the Acid Rain Program 40 CFR Part 72, measure oxygen (O ₂) or carbon dioxide (CO ₂) in the flue gas with CEMS. The O ₂ or CO ₂ CEMS shall meet the requirements of 40 CFR Part 75 in order to convert SO ₂ and NO _x continuous emission monitoring data to units of the applicable emission standards as specified in Table 3. Compliance with 40 CFR Part 75 shall constitute compliance with this requirement.
	13. 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.
	14. In accordance with the Standard Operating and Maintenance Procedures, monitor Electrostatic Precipitator performance (optimum voltage and amperage range as determined from the most recent stack testing) continuously to ensure compliance with PM emission limits.
	15. In accordance with 310 CMR 7.13 and MassDEP's Stack Test Approval letter of August 14, 2001, 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 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).
	16. In accordance with 310 CMR 7.14(2) and the Acid Rain Program 40 CFR Part 72 and 40 CFR Part 75, 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.

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2, EU3, EU4	17. In accordance with Approvals MBR-91-COM-016, MBR-91-COM-029, and the combined Approvals MBR-95-COM-017/MBR-94-COM-011, 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.
	18. In accordance with 310 CMR 7.04(2)(a), operate continuously and maintain in an accurate operating condition smoke density indicators equipped with audible alarms and recorders that signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart. Compliance with 40 CFR Part 75 for opacity monitoring shall constitute compliance with this requirement.
	19. Consistent with the requirements of 310 CMR 7.19(13)(d), 310 CMR 7.29(7), 40 CFR Part 75, and pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., measure operating time of each EU and the date and amount of time that any CEMS or COMS are inoperative.
	20. Consistent with the requirements of 310 CMR 7.19(13)(d), 310 CMR 7.29(7), and 40 CFR Part 75, and pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., monitor any occurrences when visible emissions (opacity and/or smoke exclusive of uncombined water) and emission rates of NO _x , CO, SO ₂ , and CO ₂ are in excess of the emission limits/standards contained in Table 3.
	21. 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.
	22. Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., monitor sulfur content of each new shipment of fossil fuel received. Compliance with Approvals MBR-82-COM-017, MBR-91-COM-016, MBR-91-COM-029, combined Approvals MBR-95-COM-017/MBR-94-COM-011, and/or 310 CMR 7.05(1)(d) for sulfur content of the fuel can be demonstrated through monitoring of SO ₂ emissions with CEMS which meet the requirements of 40 CFR Part 75 or fuel analysis. The analysis of sulfur content of the fuel shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by MassDEP and the U.S. Environmental Protection Agency (EPA). Fuel sulfur information may be provided by fuel suppliers.

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2, EU3, EU4	<p>23. 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:</p> <p>(1) 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.</p> <p>(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.</p> <p>* 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.</p> <p>24. In accordance with Approval MBR-84-COM-089, monitor the quantity of Used Oil Fuel burned.</p> <p>25. 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.</p> <p>26. 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.</p> <p>27. In accordance with 310 CMR 7.29(7)(b)1., monitor actual emissions, expressed in tons, for SO₂, CO₂, and NO_x for each of the preceding 12 months. Actual emissions shall be monitored for individual units and 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 SO₂, CO₂, and NO_x. MassDEP shall detail the monitoring methodology for CO and PM_{2.5} at the time regulations are promulgated by MassDEP for those pollutants.</p> <p>28. In accordance with 310 CMR 7.29(7)(b)2., monitor actual net electrical output for each of the preceding 12 months, expressed in megawatt-hours. Actual net electrical output shall be monitored for individual units and as a facility total for all units included in the calculation demonstrating compliance.</p> <p>29. In accordance with 310 CMR 7.29(7)(b)3., calculate 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 for SO₂, CO₂, and NO_x. Output-based emission rates shall be calculated for individual units and as a facility total for all units included in the calculation demonstrating compliance.</p>
EU1, EU2, EU3	<p>30. Consistent with the requirements of 310 CMR 7.29(7), monitor any occurrences when emission rates of Hg are in excess of the emission limits/standards contained in Table 3.</p> <p>31. In accordance with 310 CMR 7.29(5)(a)3.c.i., total annual Hg emissions shall be monitored by conducting emissions testing at least every other calendar quarter from October 1, 2006 until a certified Hg monitoring system is used to demonstrate compliance with the standards in 310 CMR 7.29(5)(a)3.e. or f., and using a certified Hg monitoring system thereafter.</p>

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2, EU3	<p>32. In accordance with 310 CMR 7.29(5)(a)3.d.iii., stack tests for Hg shall consist at a minimum of three runs at full load on each unit firing coal or ash according to a testing protocol acceptable to MassDEP. Unless a Hg monitoring system that measures particulate-bound Hg, either combined with or separate from the measurement of vapor-phase Hg, is installed at a unit for purposes of determining compliance with the standards in 310 CMR 7.29(5)(a)3.c., e. and f., stack tests for Hg, and certification tests and Relative Accuracy Test Audits for Hg monitoring systems, shall determine total and particulate-bound Hg. Relative accuracy shall be calculated as specified by MassDEP.</p>
	<p>33. In accordance with 310 CMR 7.29(5)(a)3.g.i., by January 1, 2008, any person who owns, leases, operates or controls an affected facility which combusts solid fossil fuel or ash shall install, certify, and operate a Hg monitoring system to measure Hg stack emissions from each solid fossil fuel- or ash-fired unit at a facility subject to 310 CMR 7.29. Any person required to install a Hg monitoring system shall meet the requirements of 310 CMR 7.29(5)(a)3.g.i. through iii..</p>
	<p>34. In accordance with 310 CMR 7.29(5)(a)3.c.ii., when ash is re-burned at an affected facility, the associated mercury emissions shall be attributable to the affected facility at which the ash is re-burned. When ash produced by an affected facility is used in Massachusetts as a cement kiln fuel, as an asphalt filler, or in other high temperature processes that volatilize Hg: (a) the Hg content of the utilized ash shall be measured weekly using a method acceptable to MassDEP; (b) all of the Hg in the utilized ash shall be assumed to be emitted, unless it can be demonstrated with data acceptable to MassDEP that a lesser amount of Hg is emitted; (c) the associated Hg emissions shall be attributed to the affected facility from which the ash is shipped to the cement kiln, asphalt batching plant or other high temperature processing location.</p>
	<p>35. In accordance with 310 CMR 7.29(7)(b)1. and MassDEP's Amended Administrative Consent Order (ACO-NE-03-7001-AMEND#1), monitor actual emissions expressed in thousandths of ounces for Hg, for each of the preceding four calendar quarters beginning October 1, 2005 and preceding 12 months beginning January 1, 2008. Actual emissions shall be monitored for individual units and as a facility total for all units included in the calculation demonstrating compliance. Actual emissions shall be monitored in accordance with 310 CMR 7.29(7)(b)1.b., c., and d. for Hg.</p>
	<p>36. In accordance with 310 CMR 7.29(7)(b)3., monitor output-based emission rates, expressed in pounds per gigawatt-hour, for Hg. Output-based emission rates shall be monitored for individual units and as a facility total for all units included in the calculation demonstrating compliance.</p>
	<p>37. In accordance with 310 CMR 7.29(7)(e), for units that apply carbon or other sorbent injection for Hg control, monitor the parameters stated in 310 CMR 7.29(7)(e)1., 2., 3., 4., 5., and 6. until such time as a Hg monitoring system is installed at that unit.</p>
	<p>38. In accordance with 310 CMR 7.29(7)(f), for units that apply technology other than carbon or other sorbent for Hg control, monitor the operating parameters proposed to and approved by MassDEP in the ECP application required under 310 CMR 7.29(6)(a)3. until such time as a Hg monitoring system is installed at that unit.</p>

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU1, EU2, EU3	39. Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., monitor ash content of each new shipment of fuel received. Compliance with Approval MBR-82-COM-017 and/or 310 CMR 7.05(3) for ash content of the fuel can be demonstrated through fuel analysis. The analysis of ash content of the fuel shall be in accordance with the applicable ASTM test methods or any other method approved by MassDEP and EPA. Fuel ash information may be provided by fuel suppliers.
EU5	40. Monitor operations regarding control of fugitive dust from the coal pile (the conveyance from ship to pile, pile management, pile to plant conveyance) in accordance with the MassDEP approved Standard Operating and Maintenance Procedures (SOMP) for coal dust mitigation at the facility.
Facility-Wide	<p>41. In accordance with 310 CMR 7.13(1), any person owning, leasing, operating or controlling a facility for which MassDEP has determined that stack testing is necessary to ascertain compliance with MassDEP's regulations or design Approval provisos shall cause such stack testing:</p> <p>(a) to be conducted by a person knowledgeable in stack testing,</p> <p>(b) to be conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and</p> <p>(c) to be conducted in the presence of a representative of MassDEP when such is deemed necessary.</p> <p>Conduct any other testing or testing methodology if and when requested by MassDEP or EPA.</p> <p>42. Monitor operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.</p>

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2, EU3, EU4	<p>1. Record on a continuous basis emissions of NO_x in accordance with the requirements of 310 CMR 7.19(13)(a)1. and 40 CFR Part 75.</p> <p>2. 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.</p> <p>3. In accordance with 310 CMR 7.28(8)(e), information on the Authorized Account Representative (AAR) Form must be kept current.</p> <p>4. 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.</p> <p>5. 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.</p> <p>6. Record on a continuous basis emissions of SO₂ in accordance with the requirements of 40 CFR Part 75.</p>

Table 5

EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2, EU3, EU4	7. Record on a continuous basis flue gas volumetric flow in accordance with the requirements of 40 CFR Part 75.
	8. In accordance with Approval MBR-90-COM-079, as revised on March 4, 1996, 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 and SO ₂ emissions shall be recorded on a continuous basis with CEMS that meet the requirements of 40 CFR Part 75.
	9. Record on a continuous basis O ₂ or CO ₂ in the flue gas in accordance with the requirements of 40 CFR Part 75.
	10. In accordance with the SOMP, record Electrostatic Precipitator performance (voltage and amperage) continuously.
	11. Consistent with the requirements of 310 CMR 7.13 and MassDEP's Stack Test Approval letter of August 14, 2001, maintain test results and reports of annual testing for PM conducted prior to November 1.
	12. Record on a continuous basis opacity in accordance with the requirements of 40 CFR Part 75 and 40 CFR Part 60, Appendix B.
	13. In accordance with Approvals MBR-91-COM-016, MBR-91-COM-029, and the combined Approvals MBR-95-COM-017/MBR-94-COM-011, 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.
	14. Maintain records of Smoke Density Indicator Recording Charts required by 310 CMR 7.04(2)(a) or COMS records required by 40 CFR Part 75 and 40 CFR Part 60, Appendix B.
	15. Consistent with the requirements of 310 CMR 7.19(13)(d), 310 CMR 7.29(7), 40 CFR Part 75, and pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., record operating time of each EU and the date and amount of time that any CEMS or COMS are inoperative.
	16. Consistent with the requirements of 310 CMR 7.19(13)(d), 310 CMR 7.29(7), and 40 CFR Part 75, and pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., record any occurrences when visible emissions (opacity and/or smoke exclusive of uncombined water) and emission rates of NO _x , CO, SO ₂ , and CO ₂ are in excess of the emission limits/standards contained in Table 3.
	17. In accordance with 310 CMR 7.19(13)(d)3., record 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.
	18. Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., maintain SO ₂ CEMS records or fuel analysis results used to demonstrate compliance with fuel sulfur content requirements.
	19. 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 include the name of the fuel oil supplier and the location where the sample was drawn for analysis to determine the nitrogen content.
	20. Consistent with Approval MBR-84-COM-089, record the quantity of Used Oil Fuel burned.

Table 5

EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2, EU3, EU4	21. 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.
	22. 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.
	23. In accordance with 310 CMR 7.19(13)(d)8., 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.
	24. Maintain records required by 40 CFR Part 75, Subpart F.
	25. In accordance with Approvals MBR-91-COM-016, MBR-91-COM-029, and the combined Approvals MBR-95-COM-017/MBR-94-COM-011, keep equipment maintenance log or equivalent on-site that includes, at a minimum, routine replacement and/or repairs performed to the low NO _x burners, SNCR process, and Electrostatic Precipitators.
	26. In accordance with Approvals MBR-91-COM-016, MBR-91-COM-029, and the combined Approvals MBR-95-COM-017/MBR-94-COM-011, maintain on-site, at all times, a copy of the SOMP for the subject emission units.
	27. In accordance with 310 CMR 7.29(7)(b)1., maintain a record of actual emissions, expressed in tons for SO ₂ , CO ₂ , and NO _x , 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 310 CMR 7.29 shall be recorded in accordance with 40 CFR Part 75 for SO ₂ , CO ₂ , and NO _x . MassDEP shall detail the record keeping methodology for CO and PM _{2.5} at the time regulations are promulgated by MassDEP for those pollutants.
	28. In accordance with 310 CMR 7.29(7)(b)2., 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.
	29. In accordance with 310 CMR 7.29(7)(b)3., 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 for SO ₂ , CO ₂ , and NO _x . Output-based emission rates shall be recorded for individual emission units and as a facility total for all units included in the calculation demonstrating compliance.
	30. In accordance with 310 CMR 7.29(7)(d), keep all measurements, data, reports and other information required by 310 CMR 7.29 on-site for a minimum of five years, or any other period consistent with the affected facility's Operating Permit.
EU1, EU2, EU3	31. Consistent with the requirements of 310 CMR 7.29(7), record any occurrences when emission rates of Hg are in excess of the emission limits/standards contained in Table 3.
	32. Consistent with the requirements of 310 CMR 7.29(5)(a)3.c. and d., maintain a record of all Hg stack testing performed at the facility.

Table 5

EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2, EU3	<p>33. Consistent with the requirements of 310 CMR 7.29(5)(a)3.c.ii., when ash produced by an affected facility is used in Massachusetts as a cement kiln fuel, as an asphalt filler, or in other high temperature processes that volatilize Hg, maintain records of the Hg content of the utilized ash.</p> <p>34. In accordance with 310 CMR 7.29(7)(b)1. and MassDEP's Amended Administrative Consent Order (ACO-NE-03-7001-AMEND#1), maintain a record of actual emissions, expressed in thousandths of ounces for Hg, for each of the preceding four calendar quarters beginning October 1, 2005 and preceding 12 months beginning January 1, 2008. Actual emissions shall be recorded for individual units and as a facility total for all units included in the calculation demonstrating compliance. Actual emissions shall be recorded in accordance with 310 CMR 7.29(7)(b)1.b., c., and d. for Hg.</p> <p>35. In accordance with 310 CMR 7.29(7)(b)3., maintain a record of output-based emission rates, expressed in pounds per gigawatt-hour for Hg, for each of the preceding 12 months and each of the 12 consecutive rolling month time periods. Output-based emission rates shall be recorded for individual units and as a facility total for all units included in the calculation demonstrating compliance.</p> <p>36. In accordance with 310 CMR 7.29(7)(e), for units that apply carbon or other sorbent injection for Hg control, maintain records of the parameters stated in 310 CMR 7.29(7)(e)1., 2., 3., 4., 5., and 6. until such time as a Hg monitoring system is installed at that unit.</p> <p>37. In accordance with 310 CMR 7.29(7)(f), for units that apply technology other than carbon or other sorbent for Hg control, maintain records of the operating parameters proposed to and approved by MassDEP in the ECP application required under 310 CMR 7.29(6)(a)3. until such time as a Hg monitoring system is installed at that unit.</p> <p>38. Pursuant to MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., maintain fuel analysis results used to demonstrate compliance with fuel ash content requirements.</p>
EU5	<p>39. Maintain records on site as required by the MassDEP approved SOMP for coal dust mitigation at the facility.</p>
Facility-Wide	<p>40. Maintain the test results of any stack testing performed in accordance with 310 CMR 7.13(1) or of any other testing or testing methodology required by MassDEP or EPA.</p> <p>41. Maintain records for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.</p> <p>42. Keep copies of Source Registration/Emission Statement Forms submitted annually to MassDEP as required per 310 CMR 7.12(3)(b).</p> <p>43. 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.</p>

Table 6

EU#	REPORTING REQUIREMENTS
EU1, EU2, EU3, EU4	<p>1. 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 NO_x, CO, and SO₂ in excess of the emission limits/standards contained in Table 3. Start-up periods shall be reported in accordance with "MassDEP's Response to Comments on Proposed Amendments to 310 CMR 7.00: RACT for NO_x", dated June 1994. Start-up periods are not included in 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 begin when the first burner is lit and end when all available or required burners are in service. The Permittee shall notify MassDEP if start-ups last longer than twenty-four (24) hours.</p> <p>2. In accordance with 310 CMR 7.13 and MassDEP's Stack Test Approval letter of August 14, 2001, on an annual basis:</p> <p>(a) submit a test 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,</p> <p>(b) include in the pretest protocol a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required PM Emissions Compliance Testing, and</p> <p>(c) submit the Emissions Compliance Testing Results report for MassDEP review within 60 days of the completion of the PM Emissions Compliance Testing.</p> <p>3. The facility shall comply with all applicable reporting requirements contained in 40 CFR Part 60, 40 CFR Part 75, and 310 CMR 7.28.</p> <p>4. 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.</p> <p>5. 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.</p> <p>6. 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 NO_x Budget unit (or group of units using a common stack) as well as information required in 40 CFR Part 75 Subpart G.</p> <p>7. 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).</p>

Table 6

EU#	REPORTING REQUIREMENTS
EU1, EU2, EU3, EU4	8. In accordance with 310 CMR 7.28(11) and (13), 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.
	9. In accordance with 310 CMR 7.28(13)(e), by October 31 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.
	10. 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.
	11. Notification of QA testing is required for Relative Accuracy Test Audits (RATAs) and Appendix E/LME (Low Mass Emission) unit tests. Notification must be made at least 21 days prior to the scheduled test date to the EPA as required by 40 CFR 75.61, to MassDEP Headquarters, Bureau of Waste Prevention, Division of Planning and Evaluation, 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).
	12. 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.
	13. In accordance with 310 CMR 7.28(11) and (13) and 40 CFR Part 75, the QA RATA or Appendix E/LME test results must be submitted in an electronic file by electronic mail (e-mail) to both the MassDEP Headquarters and MassDEP Regional offices within 45 days of completion of tests. A hardcopy of the QA RATA or Appendix E/LME test results must also be submitted to the MassDEP Regional office within 45 days of completion of tests. The electronic results must further be submitted in the quarterly electronic data report (EDR).
	14. In accordance with 310 CMR 7.28(11) and (13), 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.

Table 6

EU#	REPORTING REQUIREMENTS
EU1, EU2, EU3, EU4	<p>15. In accordance with Approval MBR-90-COM-079, as revised on March 4, 1996, submit SO₂ emission reports to verify compliance with the Massachusetts Acid Rain Law 310 CMR 7.22 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, on a quarterly basis, for each EU defined in the Permittee's SO₂ compound emission rate averaging system encompassing the Salem Harbor Station and Brayton Point Station facilities: total heating value or heat input of fuel consumed in British Thermal Units (BTU), SO₂ mass emissions, and SO₂ emission rate. The quarterly report shall also contain system-wide totals of the latter information for the Permittee's entire SO₂ compound emission rate averaging system encompassing the Salem Harbor Station and Brayton Point Station facilities. The fourth quarterly report shall contain an annual summary of the reportable information.</p>
	<p>16. In accordance with Approval MBR-84-COM-089, report the quantity of Used Oil Fuel burned 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.</p>
	<p>17. In accordance with 310 CMR 7.19(13)(d)9., submit compliance records within ten (10) days of written request by MassDEP or EPA.</p>
	<p>18. Report as required by 40 CFR Part 75, Subpart G.</p>
	<p>19. In accordance with Approvals MBR-91-COM-016, MBR-91-COM-029, and the combined Approvals MBR-95-COM-017/MBR-94-COM-011, updated versions of the SOMP shall be submitted to MassDEP. MassDEP must approve of significant changes to the SOMP prior to the change becoming effective. The updated SOMP shall supersede prior versions of the SOMP.</p>
	<p>20. In accordance with Approvals MBR-91-COM-016, MBR-91-COM-029, and the combined Approvals MBR-95-COM-017/MBR-94-COM-011, notify MassDEP of occurrence of any significant system upsets or malfunctions of air pollution control equipment, opacity monitoring, and other monitoring equipment at the facility by fax or e-mail within one hour of occurrence during normal business hours or by 9:00 AM of the next regular business day, and subsequently, in writing, attention Bureau of Waste Prevention, Compliance & Enforcement Chief, within seven (7) days of occurrence.</p>
	<p>21. In accordance with 310 CMR 7.29(7)(a), the company representative responsible for compliance shall submit a compliance report to MassDEP by January 30 of each year and pursuant to the schedule stated in MassDEP's Amended Administrative Consent Order (ACO-NE-03-7001-AMEND#1) demonstrating the facility's compliance status with the emission standards contained in 310 CMR 7.29(5)(a) and in an approved ECP. The report shall demonstrate compliance with any applicable monthly emission rate for each month of the previous calendar year and with any applicable 12-month emission rate for each of the 12 previous consecutive 12-month periods. The compliance report shall contain all of the applicable SO₂, CO₂, and NO_x elements listed in 310 CMR 7.29(7)(b).</p>
	<p>22. In accordance with 310 CMR 7.29(5)(a)5.a., by September 1, 2009, any person who owns, leases, operates or controls an affected facility shall demonstrate to MassDEP that emissions of CO₂ from the affected facility in calendar years 2006, 2007, and 2008, expressed in tons, from Part 72 units located at the affected facility did not exceed historical actual emissions as defined in 310 CMR 7.29(2).</p>

Table 6

EU#	REPORTING REQUIREMENTS
EU1, EU2, EU3, EU4	23. In accordance with 310 CMR 7.29(5)(a)5.b., by September 1, 2009, any person who owns, leases, operates or controls an affected facility shall demonstrate to MassDEP that the average emission rate of CO ₂ from Part 72 units located at the affected facility did not exceed an emission rate of 1,800 lbs/MWh in calendar year 2008. The average emission rate is calculated by dividing the total number of pounds of CO ₂ emitted by the affected facility in the calendar year by the net electrical output for the affected facility for the same calendar year.
EU1, EU2, EU3	<p>24. In accordance with 310 CMR 7.29(5)(a)3.d.iii., the results of each stack test for Hg shall be reported to MassDEP within 45 days after conducting each stack test.</p> <p>25. In accordance with 310 CMR 7.29(5)(a)3.g.i., any person required to install a Hg monitoring system shall submit a monitoring plan for MassDEP approval and shall propose to amend the approved ECP in accordance with 310 CMR 7.29(6)(n)1. to incorporate the Hg monitoring approach at least 45 days prior to commencement of initial certification testing. In accordance with 310 CMR 7.29(5)(a)3.g.ii., affected facilities must include in their monitoring plan a proposed methodology to demonstrate compliance with the emission standards in 310 CMR 7.29(5)(a)3.e. and f..</p> <p>26. In accordance with 310 CMR 7.29(7)(i), any person subject to 310 CMR 7.29(5)(a)3. shall submit the results of all Hg emissions, monitor, and optimization test reports, along with supporting calculations, to MassDEP within 45 days after completion of such testing.</p> <p>27. In accordance with 310 CMR 7.29(5)(a)3.c.ii.(iv), when ash produced by an affected facility is used in Massachusetts as a cement kiln fuel, as an asphalt filler, or in other high temperature processes that volatilize mercury, a proposal shall be submitted for MassDEP approval at least 45 days prior to such use, or at least 45 days prior to October 1, 2006, whichever is later, detailing the proposed measurement methods to be used to comply with 310 CMR 7.29(5)(a)3.c.ii.(i) and (ii).</p> <p>28. In accordance with 310 CMR 7.29(7)(a) and pursuant to the schedule stated in MassDEP's Amended Administrative Consent Order (ACO-NE-03-7001-AMEND#1), for the Hg standards at 310 CMR 7.29(5)(a)3.c., the compliance reports due by January 30 of 2007 and 2008 shall include the quarterly emissions for each quarter beginning October 1, 2005. In accordance with 310 CMR 7.29(7)(a), for the Hg standards at 310 CMR 7.29(5)(a)3.c., e., and f., the compliance report due January 30, 2009 and each report thereafter shall demonstrate compliance with any applicable annual standard for the previous calendar year and with any applicable 12-month standard for each of the 12 previous consecutive 12-month periods. The compliance report shall contain all of the applicable Hg elements listed in 310 CMR 7.29(7)(b).</p> <p>29. In accordance with 310 CMR 7.29(6)(a)3., any person who owns, leases, operates, or controls an affected facility which installs Hg control equipment that is not already contained in an ECP approval under 310 CMR 7.29 shall submit a Hg ECP amendment application under 310 CMR 7.29(6)(h) at least 90 days before intended installation and may not install such equipment until receiving approval of the revision.</p>
EU5	30. Report, as applicable, in accordance with the requirements of the MassDEP approved SOMP for coal dust mitigation at the facility.
Facility-Wide	31. Report in accordance with the requirements of 310 CMR 7.71.

Table 6	
EU#	REPORTING REQUIREMENTS
Facility-Wide	32. In accordance with 310 CMR 7.13(1)(d), 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 to be summarized and submitted to MassDEP with analyses and report within such time as agreed to in the approved test protocol. Submit the test results of any other testing or testing methodology required by MassDEP or EPA.
	33. Submit a Source Registration/Emission Statement Form to MassDEP on an annual basis as required by 310 CMR 7.12.
	34. 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).
	35. 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).
	36. Submit Annual Compliance Report to MassDEP and EPA by January 30 of each year and as required by 310 CMR 7.00: Appendix C(10)(c) and General Condition 10 of this Permit.
	37. Promptly report to MassDEP all instances of deviations from Permit requirements which are not otherwise reported to MassDEP by telephone, fax, or e-mail within three days of discovery of such deviation, as provided in 310 CMR 7.00: Appendix C(10)(f) and General Condition 25.
	38. 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	REASON
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) In accordance with the combined Approvals MBR-95-COM-017/MBR-94-COM-011, the SNCR process on EU1, EU2, and EU3 shall be operated such that the emission of ammonia ("ammonia slip") does not cause a condition of air pollution.
- b) In accordance with the combined Approvals MBR-95-COM-017/MBR-94-COM-011, an energy management feedback system shall be prohibited from use to control opacity levels.
- c) In accordance with the combined Approvals MBR-95-COM-017/MBR-94-COM-011, the option to replace the burners on EU2 with low NO_x burners shall remain in effect if the need arises in the future. MassDEP shall be notified in writing within thirty (30) days of completion of the installation of the low NO_x burners on EU2.
- d) Per data as supplied through the Permittee's Operating Permit application (MBR-95-OPP-025, Transmittal No. 101940), EU1, EU2, and EU3 shall continue to emit products of combustion through three (3) separate flues (Flue 1, 2, and 3, respectively) contained in an existing reinforced concrete stack, each flue having the following parameters:

Flue 1

Flue Height	430 feet
Flue Exit Diameter	9 feet
Flue Material	Steel

Flue 2

Flue Height	430 feet
Flue Exit Diameter	9 feet
Flue Material	Steel

Flue 3

Flue Height	430 feet
Flue Exit Diameter	12.5 feet
Flue Material	Steel

Per data as supplied through the Permittee's Operating Permit application (MBR-95-OPP-025, Transmittal No. 101940), EU4 shall continue to emit through a separate existing reinforced concrete stack (Flue 4) having the following parameters:

Flue 4

Flue Height	500 feet
Flue Exit Diameter	18.5 feet
Flue Material	Acid Brick

- e) NO_x Allowance Trading Program, 310 CMR 7.28

EU1, EU2, EU3, and EU4 are subject to the requirements of the NO_x Allowance Trading Program, 310 CMR 7.28. MassDEP issued a Phase I and Phase II Combined NO_x Allowance Trading Program Emission Control Plan Approval MBR-01-728-008 (Transmittal No. W024183) for Salem Harbor Station on July 30, 2002 and modified said Approval (Transmittal No. W078116) on October 31, 2006.

NO_x 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 NO_x 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-01-728-008 (Transmittal No. W078116).

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) Massachusetts Clean Air Interstate Rule, 310 CMR 7.32

The owner/operator of Salem Harbor Station is subject to and shall comply with the Massachusetts Clean Air Interstate Rule (CAIR), 310 CMR 7.32 and has submitted a CAIR Emission Control Plan Application pursuant to 310 CMR 7.32(3).

- g) Federal Acid Rain Program, Phase II Acid Rain Permit

EU1, EU2, EU3, and EU4 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 Parts 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 Salem Harbor Station on December 22, 1997, renewed said Permit on January 27, 2003, and issued a Draft Acid Rain Permit Renewal on October 21, 2008. MassDEP is issuing a Final Acid Rain Permit Renewal concurrently with this operating Permit and is incorporating the requirements of the said renewal Phase II Acid Rain Permit into this Operating Permit. The future Phase II Acid Rain requirements will renew in the Operating Permit.

Within 60 days of the end of each calendar year, the facility shall hold in its SO₂ allowance account at least one allowance for each ton of SO₂ emitted during the previous year. An allowance is a limited authorization to emit SO₂ 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 SO₂ 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), 40 CFR Part 76, and the renewal Phase II Acid Rain Permit issued concurrently with this Operating Permit are identified below:

EU#	ALLOWANCES	YEAR					
		2008	2009	2010	2011	2012	2013
EU1	SO _x	3338	3338	3345	3345	3345	3345
	NO _x	Standard annual average emission limitation of 0.46 lb/MMBtu for Phase II dry bottom, wall fired boiler					
EU2	SO _x	3407	3407	3414	3414	3414	3414
	NO _x	Standard annual average emission limitation of 0.46 lb/MMBtu for Phase II dry bottom, wall fired boiler					
EU3	SO _x	5459	5459	5470	5470	5470	5470
	NO _x	Standard annual average emission limitation of 0.46 lb/MMBtu for Phase II dry bottom, wall fired boiler					
EU4	SO _x	12567	12567	12346	12346	12346	12346

- h) CO₂ Budget Trading Program, 310 CMR 7.70
- EU1, EU2, EU3, and EU4 are CO₂ budget units subject to the requirements of the CO₂ Budget Trading Program, 310 CMR 7.70; hence, the Permittee shall comply with all applicable requirements therein. MassDEP issued a CO₂ Budget Trading Program Emission Control Plan Approval MBR-08-CO₂-005 (Transmittal No. X007417) to Salem Harbor Station on December 11, 2008.
- i) The Permittee is subject to, and has stated in their Operating Permit application (MBR-95-OPP-025, Transmittal No. 101940), that the Permittee is in compliance with the requirements of 40 CFR Part 82: Protection of Stratospheric Ozone. These requirements are applicable to this facility and the United States Environmental Protection Agency enforces these requirements.
- j) 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.
- k) In accordance with the combined Approvals MBR-95-COM-017/MBR-94-COM-011, test burns of alternative fuels can be conducted provided that all emission limits in Table 3 are adhered to. At least thirty (30) days prior to the date of the scheduled test burn, a Standard Test Protocol must be submitted to this office, in writing. Unless otherwise notified by MassDEP within said thirty day period, conditional approval is granted to the Permittee for the said test burn. A final test results report must be submitted to this office, attention Permit Chief for the Bureau of Waste Prevention, within sixty (60) days after completion of the test burn. This report must contain any plans to burn the alternative fuel on a permanent basis. Written MassDEP approval must be received prior to burning the alternative fuel on a permanent basis.
- l) In accordance with 310 CMR 7.29(4)(b), any person subject to 310 CMR 7.29 shall comply with all other applicable regulations. If provisions or requirements from any other regulation or Permit conflict with a

provision of 310 CMR 7.29, the more stringent of the provisions will apply unless otherwise determined by MassDEP in this Operating Permit. Regardless of MassDEP's determination in this Operating Permit, any person subject to 310 CMR 7.29 shall comply with all applicable federal requirements.

- m) In accordance with 310 CMR 7.29(4)(c), in case of imminent threat to the reliability of New England's electricity system, MassDEP may promulgate an emergency regulation as per M.G.L. c. 30A, §§ 2 and 3, to mitigate the emergency situation.
- n) In accordance with 310 CMR 7.29(7)(c), MassDEP may verify compliance by whatever means necessary, including but not limited to:
 - 1. Inspection of a unit's operating records;
 - 2. Requiring the person who owns, leases, operates or controls an affected facility to submit information on actual electrical output of company generating units provided to that person by the New England Independent System Operator (ISO);
 - 3. Testing emission monitoring devices; and,
 - 4. Requiring the person who owns, leases, operates or controls an affected facility to conduct emissions testing under the supervision of MassDEP.
- o) In accordance with "MassDEP's Response to Comments on Proposed Amendments to 310 CMR 7.00: RACT for NO_x", dated June 1994, start-up periods are not included in 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 begin when the first burner is lit and end when all available or required burners are in service. The Permittee shall notify MassDEP if start-ups last longer than twenty-four (24) hours.

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 - SO₂ Allowance System;
310 CMR 7.22 - SO₂ Emissions Reductions for the Purpose of Reducing Acid Rain;
310 CMR 7.28 - NO_x Allowance Trading Program;
310 CMR 7.29 - Emissions Standards for Power Plants;
310 CMR 7.32 - Massachusetts Clean Air Interstate Rule;
310 CMR 7.70 - CO₂ Budget Trading Program;
310 CMR 7.00: Appendix A - Emission Offsets and Nonattainment Review;
and,
310 CMR 7.00: Appendix B - Emission Banking, Trading, and Averaging.

Pursuant to 310 CMR 7.00: Appendix C(7)(b), emission 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 emission trading

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

40 CFR Parts 72, 73, and 74 - SO₂ Allowance System;
310 CMR 7.22 - SO₂ Emissions Reductions for the Purpose of Reducing Acid Rain;
310 CMR 7.28 - NO_x Allowance Trading Program;
310 CMR 7.29 - Emissions Standards for Power Plants;
310 CMR 7.32 - Massachusetts Clean Air Interstate Rule;
310 CMR 7.70 - CO₂ Budget Trading Program;
310 CMR 7.00: Appendix A - Emission Offsets and Nonattainment Review;
and,
310 CMR 7.00: Appendix B - Emission Banking, Trading, and Averaging.

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 provided for in this Permit.

8. COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5. In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

The Permittee shall comply with all requirements of MassDEP's Administrative Consent Order (ACO-NE-03-7001) effective as of June 19, 2003 and Amended Administrative Consent Order (ACO-NE-03-7001-AMEND#1) effective as of May 26, 2005.

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#op>, 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, Table 7.

(c) Nothing in this Permit shall alter or affect the following:

- i. the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
- ii. the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §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, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A.

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

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

14. PERMIT TERM

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 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 based¹ emission limitations specified in this Permit as a result of an emergency². 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, fax or electronic mail (e-mail) within three (3) days of discovery of such deviation:

- Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- Exceedances of parameter limits established by your Operating Permit or other Approvals, where the parameter limit is identified by the Permit

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.

- or Approval as surrogate for an emission limit.
- Exceedances of Permit operational limitations directly correlated to excess emissions.
 - Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other Approvals.
 - Failure to perform QA/QC measures as required by your Operating Permit or other Approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in 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/agforms.htm#op>. This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations 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)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's Permit. The Permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

(a) Administrative Amendments - The Permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).

(b) Minor Modifications - The Permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).

(c) Significant Modifications - The Permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).

(d) No Permit revision shall be required, under any approved economic incentives program, marketable Permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

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.