State of New Hampshire
Department of Environmental Services
Air Resources Division

Temporary Permit

Permit No: TP-xxx
Date Issued: February 6, 2015

This certifies that:

Northeast Utilities
Public Service of New Hampshire
780 North Commercial Street
Manchester NH 03101

has been granted a Temporary Permit for:

Installation of Dry Sorbent and Activated Carbon Injection Systems on Units SR4 & SR6

at the following facility and location:

Public Service of New Hampshire
Schiller Station
400 Gosling Road
Portsmouth, NH 03801

Facility ID No: **3301500012**
Application No: **14-0081**, received February 27, 2014 - Temporary Permit, with additional information received on April 29, 2014, May 27, 2014 and October 21, 2014.

which includes devices that emit air pollutants into the ambient air as set forth in the permit application referenced above which was filed with the New Hampshire Department of Environmental Services, Air Resources Division (Division) in accordance with RSA 125-C of the New Hampshire Laws. Request for permit renewal must be received by the Division at least 90 days prior to expiration of this permit and must be accompanied by the appropriate permit application forms.

This permit is valid upon issuance and expires on **xxx**.

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Director
Air Resources Division

Abbreviations and Acronyms

AAL	Ambient Air Limit
acf	actual cubic foot
ags	above ground surface
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAS	Chemical Abstracts Service
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	CO_2 equivalent
DER	Discrete Emission Reduction
DES	New Hampshire Department of Environmental Services
Env-A	New Hampshire Code of Administrative Rules – Air Related Programs
ERC	Emission Reduction Credit
ft	foot or feet
ft3	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
HHV	high heating value
hp	horsepower
hr	hour
kW	kilowatt
lb	pound
LPG	Liquefied Petroleum Gas
MM	million
MSDS	Material Safety Data Sheet
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standard
PM_{10}	Particulate Matter < 10 microns
$PM_{2.5}$	Particulate Matter < 2.5 microns
ppm	parts per million
psi	pounds per square inch
RACT	Reasonably Available Control Technology
RSA	Revised Statutes Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SO_2	Sulfur Dioxide
STMS	Sorbent Trap Monitoring System
TSP	Total Suspended Particulate
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

I. Facility Description

Public Service of New Hampshire - Schiller Station (PSNH-Schiller) is a wood and fossil fuel-fired electricity generating facility owned and operated by PSNH, a subsidiary of Northeast Utilities. The facility includes three utility boilers: one wood and fossil fuel-fired boiler (designated as emission unit SR5) and two fossil fuel-fired boilers (designated as emission units SR4 and SR6). The facility also includes a combustion turbine, an emergency generator, primary and secondary coal crushers, coal and wood handling systems, and various insignificant and exempt activities.

Emission units SR4 and SR6 are equipped with electrostatic precipitators (ESPs) to control the emissions of particulate matter (PM), and selective non-catalytic reduction (SNCR) systems and overfire air (OFA) to control nitrogen oxides (NOx) emissions. PSNH operates SNCR on units SR4 and SR6 as necessary to maintain compliance with NOx emission limits. Each boiler stack is equipped with a continuous emissions monitoring system (CEMS) for NOx and sulfur dioxide (SO_2) and a continuous opacity monitoring system (COMS).

PSNH-Schiller is currently operating under Title V Operating Permit TV-0053, which was issued on June 6, 2014 and expires on June 30, 2019.

II. Project Description

PSNH-Schiller is a major source of hazardous air pollutants as defined under Section 112 of the Clean Air Act. Emission units SR4 and SR6 are electricity steam generating units (EGUs) and are therefore subject to 40 Code of Federal Regulations (CFR), Part 63, Subpart UUUUU *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units* (also known as Mercury and Other Air Toxics Standards, or MATS). These units are considered to be "existing" EGUs as they were installed prior to May 3, 2011.

PSNH-Schiller has proposed to install Dry Sorbent Injection (DSI) and Activated Carbon Injection (ACI) systems on SR4 and SR6 for the purpose of complying with Subpart UUUUU. The DSI system will be used to control the emissions of acid gases such as hydrogen chloride (HCl) and SO_2. Sorbents may include trona (sodium sesquicarbonate) and sodium bicarbonate. Activated carbon will be used to control mercury emissions. Sorbents and activated carbon will be injected into the flue gas stream through strategically located ports upstream of ESPs. The reaction products and sorbents are then removed downstream by the ESPs.

The compliance date for Subpart UUUUU is April 16, 2015. PSNH has requested a one year extension to comply Subpart UUUUU. As per the request of PSNH, DES through this permitting action is granting a one year compliance extension, to April 16, 2016.

This Temporary Permit includes applicable requirements of Subpart UUUUU and other new operating conditions for the air pollution control equipment. All conditions of previously issued permit TV-0053 that this permit supersedes are specifically identified in this permit. Upon issuance of this permit, the Owner or Operator shall comply with terms and conditions of permit TV-0053 and this permit.

III. Emission Unit Identification

This permit covers the devices identified in Table 1:

Table 1 - Emission Unit Identification			
Emission Unit ID	**Device Identification**	**Installation Date**	**Maximum Design Capacity and Permitted Fuel Type(s)** [1]
SR4	Steam Generating Unit No. 4 with low NOx Burners (LNB) and overfire air Dry bottom wall-fired boiler Manufacturer: Foster Wheeler Model # FW Serial # 90-1628	1952	574 MMBtu/hr Bituminous coal or Bituminous coal/biomass mixture - 22.6 tons/hr 575 MMBtu/hr No. 6 fuel oil - 3,833 gal/hr
SR6	Steam Generating Unit No. 6 with LNB and overfire air Dry bottom wall-fired boiler Manufacturer: Foster Wheeler Model # FW Serial # 36-3413	1957	574 MMBtu/hr Bituminous coal or Bituminous coal/biomass mixture - 22.6 tons/hr 575 MMBtu/hr No. 6 fuel oil - 3,833 gal/hr

IV. Pollution Control Equipment Identification

Air pollution control equipment listed in Table 2 shall be operated at all times (except as provided in Table 3, Item 4) that the associated devices are operating in order to meet permit conditions.

Table 2 - Pollution Control Equipment Identification			
Pollution Control Equipment ID	**Description**	**Purpose**	**Emission Unit Controlled**
SR4-PC1	ESP	For control of PM	SR4
SR4-PC3	Sorbent Injection System	For control of acid gases	SR4
SR4&6-PC4	Activated Carbon Injection System[2]	For control of mercury	SR4 & SR6
SR6-PC1	ESP	For control of PM	SR6
SR6-PC3	Sorbent Injection System	For control of acid gases	SR6

[1] The fuel consumption rates presented in Table 1 are based on the following assumed heating values:
Bituminous coal - 12,700 Btu/lb;
No. 6 fuel oil - 150,000 Btu/gal;
The maximum fuel consumption of the unit may vary based on the actual heat content of the fuel burned.

[2] A single activated carbon injection system will serve both units SR4 & SR6.

V. Operating and Emission Limitations

The Owner or Operator shall be subject to the operating and emission limitations identified in Table 3:

Table 3 - Operating and Emission Limitations

Item #	Requirement	Applicable Emission Unit	Regulatory Basis
1.	*NESHAP for Coal-Fired EGUs - Particulate matter* a.) Filterable particulate matter (PM) emissions shall be limited to 0.030 pounds per million British Thermal Units of heat input (lb/MMBtu).[3]	SR4 & SR6	40 CFR 63.9991
	b.) An EGU may qualify for low-emitting EGU (LEE) status for PM if the performance tests conducted in accordance with Table 4, Item 7 for 3 consecutive years demonstrate that the emissions are less than 50 percent of the emission limit specified above.		40 CFR 63.10005(h)
2.	*NESHAP for Coal-Fired EGUs - Hydrogen chloride* a.) Hydrogen chloride emissions shall be limited to 0.0020 lb/MMBtu of heat input[3].	SR4 & SR6	40 CFR 63.9991
	b.) An EGU may qualify for LEE status for HCl if the performance tests conducted in accordance with Table 4, Item 7 for 3 consecutive years demonstrate that the emissions are less than 50 percent of the emission limit specified above.		40 CFR 63.10005(h)
3.	*NESHAP for Coal-Fired EGUs - Mercury* a.) Mercury (Hg) emissions shall be limited to 1.2 pounds per trillion British thermal units of heat input (lb/TBtu) [3].	SR4 & SR6	40 CFR 63.9991
	b.) An EGU may qualify for LEE status for Hg emissions if the performance test conducted once every 12 calendar months in accordance with Table 4, Item 5 demonstrates that, either: i. Average emissions less than 10% of the emission limit specified in Item 3.a. above; or ii. Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the emission limit specified in Item 3.a. above.		40 CFR 63.10005(h)
4.	*General Compliance Requirements* a.) Comply with the emission limits at all times except during periods of startup and shutdown. b.) Comply with the following work practice requirements	SR4 & SR6	40 CFR 63.10000(a) & (b)

[3] The averaging time for emission limitations is determined by the test methods provided in Table 5 to Subpart UUUUU or on a 30-boiler operating day rolling average if CMS is used.

Table 3 - Operating and Emission Limitations			
Item #	**Requirement**	**Applicable Emission Unit**	**Regulatory Basis**
	during periods of startup or shutdown: i. Operate all required continuous monitoring system (CMS) during startup[4] and shutdown[5]. ii. For startup of a unit, use clean fuels as defined in §63.10042 for ignition. iii. Upon converting to firing coal or residual oil, engage all of the applicable control technologies (i.e., electrostatic precipitators SR4-PC1 and SR6-PC1) except dry sorbent and activated carbon injection systems. Dry sorbent and activated carbon injection systems must be started appropriately to comply with relevant standards applicable during normal operation. iv. While firing coal or residual oil during shutdown, vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal or residual oil being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. v. Collect required monitoring data during startup and shutdown periods, as specified in §63.10020(a). c.) At all times operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.		
5.	*Tune-up Requirements* No later than October 13, 2016, conduct an initial tune-up of each EGU as specified in Table 4, Item 12.	SR4 & SR6	40 CFR 63.10005(e)

[4] Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Any fraction of an hour in which startup occurs constitutes a full hour of startup.

[5] Shutdown means the cessation of operation of an EGU for any purpose. Shutdown begins when the EGU no longer generates electricity or when no coal or liquid oil is being fired in the EGU, whichever is earlier. Shutdown ends when the EGU no longer generates electricity and no fuel is being fired in the EGU. Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown.

Table 3 - Operating and Emission Limitations			
Item #	**Requirement**	**Applicable Emission Unit**	**Regulatory Basis**
6.	If mercury emissions are not continuously monitored, maintain the 30-boiler operating day average activated carbon injection rate in lbs/hr at or above the average injection rate observed during the most recent performance test demonstrating compliance with the Hg emission limit.	SR4 & SR6	Env-A 604.01
7.	Maintain the daily average of sorbent injection rate in lbs/hr at or above the average injection rate observed during the most recent performance stack test demonstrating compliance with the HCl emission limit.	SR4 & SR6	Env-A 604.01
8.	**Condition VIII.B Table 5, Item 8 of TV-0053 is replaced with the following:** Comply with the applicable requirements of 40 CFR 63 Subpart UUUUU *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units* as identified in this permit: a.) By completing the installation of all required pollution control equipment by April 16, 2016; and b.) Demonstrating compliance by conducting the required initial performance tests and tune-up by October 13, 2016.	SR4 & SR6	40 CFR 63.9984 & 40 CFR 63.6

VI. Monitoring and Testing Requirements

The Owner or Operator is subject to the monitoring and testing requirements as contained in Table 4:

Table 4 - Monitoring and Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
1.	CMS	*Monitoring Plan*[6] a.) If compliance is demonstrated with any emissions limit specified in Table 3 through the use of a continuous monitoring system (which includes a continuous emissions monitoring system or a sorbent trap monitoring system (STMS)), update the existing monitoring plan required by TV-0053, Table 9, Item 22 to include the following items. i. Installation of the CMS or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). See § 63.10010(a) for specific CMS installation requirements. ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. iii. Provisions of Env-A 808.04(c), *CEM Monitoring Plan*. b.) Operate and maintain the required CMS according to the monitoring plan.	Submit to the Division at least 90 days prior to installation of any CMS	SR4 & SR6	40 CFR 63.10000(d) & Env-A 808.04
2.	CMS	*Demonstration of Continuous Compliance with Emission Limits Using CMS* Comply with the following requirements if CMS is used to demonstrate compliance with the emissions limits in Table 3: a.) Monitor and collect data as specified below and in accordance with the	Continuously	SR4 & SR6	40 CFR 63.10020

[6] This permit condition has been streamlined to cover the requirements of Env-A 808.04 and 40 CFR 63.10000(d). The monitoring plan required by this permit condition is referred to the "site-specific monitoring plan" in Subpart UUUUU.

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		monitoring plan. b.) Must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see 40 CFR §63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. c.) Conduct monitoring system repairs in response to monitoring system malfunctions and return the monitoring system to operation as expeditiously as practicable. d.) Data recorded during EGU startup or shutdown may not be used in calculations used to report emissions, except as otherwise provided in Table 4, Item 6.b. In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. All of the quality-assured data collected during all other periods must be used in assessing the operation of the EGU and associated control system. e.) Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments), failure to collect required data is a deviation from the monitoring			

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		requirements.			
3.	CMS	Except as otherwise provided in Item 2.d above, if a CEMS is used to measure PM, HCl, or Hg emissions, or a sorbent trap monitoring system is used to measure Hg emissions, continuous compliance must be demonstrated by using all quality-assured hourly data recorded by the CEMS (or sorbent trap monitoring system) and the other required monitoring systems (e.g., flow rate or CO_2 systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day rolling average basis, updated at the end of each new boiler operating day. Use Equation 1 to determine the 30-boiler operating day rolling average. $Boiler\ operating\ day\ average = \frac{\sum_{i=1}^{n} Her_i}{n}$ - (Eq. 1) Where: Her_i is the hourly emissions rate for hour i and n is the number of hourly emissions rate values collected over 30-boiler operating days.	Continuously	SR4 & SR6	40 CFR 63.10021(b)
4.	CMS location	*Single unit-single stack configurations* For an affected unit that exhausts to the atmosphere through a single, dedicated stack, install the required CEMS and sorbent trap monitoring systems either in the stack or at a location in the ductwork downstream of all emissions control devices, where the pollutant and diluents concentrations are representative of the emissions that exit to the atmosphere.	N/A	SR4 & SR6	40 CFR 63.10010(a)(1)
5.	Hg	*LEE Testing Provisions for Hg* a.) To determine whether a unit qualifies for LEE status for Hg, conduct performance testing in accordance with 40 CFR 63.10005(h) and Table 5 to Subpart UUUUU.	Initially by October 13, 2016 and once every year thereafter[7]	SR4 & SR6	40 CFR §§ 63.10005(h) & 63.10006(b)

[7] Applicable if PSNH chooses LEE option for Hg.

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		b.) If any Hg testing results show that the emission unit does not meet LEE eligibility requirements specified in Table 3, Item 3.b, LEE status is lost. Should this occur, operate a Hg CEMS or sorbent trap monitoring system. The Owner or Operator must obtain three calendar years of testing and CEMS or sorbent trap monitoring system data that satisfy the LEE emission criteria to reestablish LEE status.			
6.	Mercury	*Non-LEE Compliance Demonstration for Hg* a.) If a coal-fired EGU does not qualify as a LEE for Hg, demonstrate initial and continuous compliance through use of a Hg CEMS or a sorbent trap monitoring system. b.) A single sorbent trap monitoring system may be used to demonstrate compliance with the mercury emissions limit at all times (including startup periods and shutdown periods) and to report average mercury concentration. Follow the startup or shutdown requirements as specified in Table 3, Item 4.b for each coal-fired EGU.	Initial compliance demonstration by October 13, 2016 and continuously	SR4 & SR6	40 CFR §§ 63.10000(c)(1)(vi) & 63.10005(d)(3)
		c.) The Hg CEMS or a sorbent trap monitoring system must be installed, certified, operated, maintained and quality-assured in accordance with Appendix A to Subpart UUUUU. Calculate and record a 30-boiler operating day rolling average Hg emission rate, in units of the standard (i.e., lb/TBtu), updated after each new boiler operating day[8]. Each 30-boiler operating day rolling average emission rate, calculated according to section 6.2 of Appendix A to the Subpart UUUUU, is the average of all of the valid hourly Hg emission rates in the preceding 30-			40 CFR 63.10010(g)

[8] Update after each new boiler operating day for Hg CEMS. If STMS is used, update the rolling average Hg emission rate within one day of receipt of the analytical data for sorbent traps.

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		boiler operating days.			
		d.) The Hg CEMS or sorbent trap monitoring system must pass an initial performance evaluation.	Prior to initial compliance demonstration		40 CFR 63.10005(d)
		e.) The first 30-boiler operating day rolling average emission rate obtained with a certified Hg CEMS or sorbent trap monitoring system after April 16, 2016, expressed as lb/TBtu, is the initial performance test.			40 CFR 63.10011(c)(1)
		f.) To demonstrate initial compliance using either a Hg CEMS or a sorbent trap monitoring system, the initial performance test consists of 30- boiler operating days of data collected with the certified monitoring system. Pollutant emission rates measured during startup and shutdown periods must be included in the compliance demonstration, as provided in Item 6.b above. Initial compliance is achieved if the arithmetic average of 30-boiler operating days of quality assured Hg CEMS or sorbent trap monitoring system data expressed in lb/TBtu meets the mercury emission limit specified in Table 3, Item 3.a.			40 CFR §§ 63.10005(a)(2) & 63.10005(d)(3)
7.	PM & HCl	*LEE Testing Provisions for PM and HCl* a.) To demonstrate initial and periodic compliance with the PM and HCl emission limits specified in Table 3, Items 1b & 2b, conduct stack testing in accordance with Table 5 of Subpart UUUUU and 40 CFR §63.10007. b.) When conducting LEE testing, the minimum sample volume specified Table 2 of Subpart UUUUU must be increased nominally by a factor of two. c.) Follow the instructions in §63.10007(e) and Table 5 of Subpart UUUUU to convert the test data to lb/MMBtu. d.) For candidate LEE units, performance tests must be conducted quarterly over a 3 consecutive year period and in all	Initial compliance demonstration by October 13, 2016 and as specified thereafter	SR4 & SR6	40 CFR §§ 63.10005(h) & 63.10007

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		such tests, emission results must be less than 50 percent of the applicable emission limit.			
		e.) Upon achieving LEE status for a given pollutant, in order to demonstrate continued LEE status for PM or HCl emission limit, a performance test must be conducted at least once every three years.			40 CFR §§ 63.10000(c) (iii) & 63.10006(b)
		f.) LEE status for a pollutant is lost if a performance test on a PM or HCl LEE unit shows emissions in excess of 50 percent of the emission limit specified in Table 3, Items 1.a or 2.a respectively. In order to reapply for LEE status, conduct quarterly performance tests (except as otherwise provided in Table 4, Item 10.b) for that pollutant, until all performance tests over a consecutive 3-year period show compliance with the LEE criteria.			40 CFR 63.10006(h)
8.	PM from non-LEE	a.) If a coal-fired EGU does not qualify as a LEE for filterable particulate matter, then demonstrate compliance through the use of a PM CEMS or conduct compliance performance testing quarterly.	Initial compliance demonstration by October 13, 2016	SR4 & SR6	40 CFR 63.10000(c) (iv)
		b.) Conduct stack testing according to §63.10007 and Table 5 to Subpart UUUUU, except as otherwise provided in Table 4, Item 10.b.	Quarterly		40 CR §§ 63.10006(c) & 63.10007
		Alternatively, if compliance with the PM limit is demonstrated through CEMS: c.) The PM CEMS must be installed, maintained, quality-assured and operated in accordance with Env-A 808 and §63.10010(i). The compliance limit will be expressed as a 30-boiler operating day rolling average of the numerical emissions limit value specified in Table 3, Item 1.a. d.) Prior to the initial compliance demonstration with the PM emission	Continuously		40 CFR §§ 63.10005(a) & (d), 63.10010(i) & 63.10011(c)(2)

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		limit, the PM CEMS must pass a performance evaluation. e.) The first 30-boiler operating day average emission rate obtained with certified CEMS after April 16, 2016, expressed in lb/MMBtu, is the initial performance test. f.) Initial compliance is achieved if the arithmetic average of 30-boiler operating days of quality-assured CEMS data, expressed as lb/MMBtu, meets the PM emissions limit in specified in Table 3, Item 1.a. Use Equation 19-19 of Method 19 in Appendix A-7 to 40 CFR 60 to calculate the 30-boiler operating day average emissions rate. g.) Pollutant emission rates measured during startup and shutdown periods are not to be included in the compliance demonstration.			
9.	HCl from non-LEE	a.) If a coal-fired EGU does not qualify as a LEE for hydrogen chloride, initial and continuous compliance may be demonstrated through use of an HCl CEMS or by conducting an initial and periodic quarterly performance stack test.	Initial compliance demonstration by October 13, 2016	SR4 & SR6	40 CFR 63.10000 (c)(v)
		b.) Conduct stack testing quarterly according to §63.10007 and Table 5 to Subpart UUUUU, except as otherwise provided in Table 4, Item 10.b.	Quarterly		40 CFR §§ 63.10006(d) & 63.10007
		Alternatively, if compliance with the HCl limit is demonstrated through CEMS: c.) Install, certify, operate, maintain, and quality-assure the data from the HCl CEMS in accordance with Appendix B to Subpart UUUUU. Calculate and record a 30-boiler operating day rolling average HCl emission rate in lb/MMBtu, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate is the average of all the valid hourly HCl emission rates in the	Continuously		40 CFR §§ 63.10005(a) &(d), 63.10010(e) & 63.10011(c)(1)

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		preceding 30 boiler operating days (see section 9.4 of Appendix B). d.) Prior to the initial compliance demonstration with the emission limit, the HCl CEMS must pass a performance evaluation. e.) The first 30 boiler operating day average emission rate obtained with certified CEMS after April 16, 2016, expressed in lb/MMBtu, is the initial performance test. f.) Initial compliance is achieved if the arithmetic average of 30-boiler operating days of quality-assured CEMS data, expressed as lb/MMBtu, meets the HCl emissions limit in specified in Table 3, Item 2.a. g.) Pollutant emission rates measured during startup and shutdown periods are not to be included in the compliance demonstration.			
10.	PM, HCl & Hg	*Stack Testing Frequency & Time Between Performance Tests* a.) Except as otherwise provided in b. below, conduct the required performance tests at the intervals specified in §63.10006(f). b.) Performance test may be skipped in those quarters during which less than 168 boiler operating hours occur, except that a performance test must be conducted at least once every calendar year.	As specified	SR4 & SR6	40 CFR §§63.10006(f) & 63.10021(d)
11.	Stack Testing - Operating Conditions	a.) Operate the unit at maximum normal operating load conditions during each periodic performance test. b.) Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run.	Each stack test performed to evaluate compliance with Subpart UUUUU	SR4 & SR6	40 CFR 63.10007(a)(2)
12.	Tune-up	Conduct a tune-up of each EGU, which	Initial by October 13,	SR4 & SR6	40 CFR 63.10021(e)

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		shall consist of the following: a.) As applicable, inspect the burner[9] and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows: i. Burner or combustion control component parts needing replacement that affect the ability to optimize NOx and carbon monoxide (CO) must be installed within 3 calendar months after the burner inspection; ii. Burner or combustion control component parts that do not affect the ability to optimize NOx and CO may be installed on a schedule determined by the operator; b.) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type; c.) As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors; d.) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to	2016 & every 36 calendar months thereafter		

[9] The first burner inspection may be delayed until the next scheduled unit outage, provided the requirements of §63.10005(f) are met. Subsequently, the burner must be inspected at least once every 36 calendar months.

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
		dampers, actuators, controls, and sensors; e.) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O_2 probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary; f.) Optimize combustion to minimize generation of CO and NOx. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NOx optimization includes burners, overfire air controls, concentric firing system improvements, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, control systems calibrations, and adjusting combustion zone temperature profiles; g.) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NOx in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Portable CO, NOx and O_2 monitors may be used for this measurement.			

Table 4 - Monitoring and Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Unit**	**Regulatory Basis**
13.	PM, HCl & Hg	The Owner or Operator shall be subject to fees for any testing and monitoring which Division personnel undertake or audit in accordance with this permit.	Initial performance test	SR4 & SR6	Env-A 705.04
14.	Monitoring Plan for DSI and ACI Systems	Submit an air pollution control monitoring plan containing the information specified in Env-A 810.01(c).	By January 17, 2016	SR4-PC3, SR4&6-PC4 & SR6-PC3	Env-A 810

VII. Recordkeeping Requirements

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 5:

Table 5 - Recordkeeping Requirements				
Item #	**Requirement**	**Duration/ Frequency**	**Applicable Unit**	**Regulatory Basis**
1.	Maintain records of sorbent and activated carbon usage in pounds for each unit.	Daily and 30-boiler operating day average for activated carbon Daily for acid gas sorbent	SR4 & SR6	Env-A 906.01
2.	Maintain the following records: a.) If the facility is required to (or elects to) continuously monitor Hg and/or HCl emissions, the records required under Appendix A and/or Appendix B to Subpart UUUUU must also be kept. b.) A copy of each notification and report that was submitted to comply with Subpart UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report, according to the requirements in §63.10(b)(2)(xiv). c.) Records of performance stack tests, or other compliance demonstrations and performance evaluations, as required in § 63.10(b)(2)(viii). d.) If compliance is demonstrated using CEMS, keep the following records: i. Records described in § 63.10(b)(2)(vi) through (xi). ii. Previous (i.e., superseded) versions of the	On a continuous basis	SR4 & SR6	40 CFR 63.10032, Env-A 902 & 40 CFR 70.6(a)(3)(ii)(B)

Table 5 - Recordkeeping Requirements				
Item #	**Requirement**	**Duration/ Frequency**	**Applicable Unit**	**Regulatory Basis**
	performance evaluation plan as required in § 63.8(d)(3). iii. Request for alternatives to relative accuracy test for CEMS as required in § 63.8(f)(6)(i). iv. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. e.) Records of quarterly performance tests and periodic performance tune-ups as specified in Table 7 to Subpart UUUUU. f.) Records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used. g.) For an EGU that qualifies as an LEE under §63.10005(h), annual records that document that emissions from the EGU in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year. h.) Records of the occurrence and duration of each startup and/or shutdown. i.) Records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment. j.) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. k.) Records of the type(s) and amount(s) of fuel used during each startup or shutdown.			
3.	*Quality Control/Quality Assurance (QA/QC) Plan* a.) If compliance is demonstrated with any applicable emissions limit specified in Table 3 through the use of a continuous monitoring system, update the QA/QC plan required by TV-0053, Table 9, Item 21 to include the following information for the CMS: i. Schedule for conducting initial and periodic performance evaluations. ii. Performance evaluation procedures and acceptance criteria (e.g., calibrations), including the quality	As specified	SR4 & SR6	40 CFR 63.10000(d) & Env-A 808.06

Table 5 - Recordkeeping Requirements				
Item #	**Requirement**	**Duration/ Frequency**	**Applicable Unit**	**Regulatory Basis**
	control program in accordance with the general requirements of §63.8(d). iii. On-going operation and maintenance procedures, in accordance with the general requirements of §§ 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii). iv. Conditions that define a CMS that is out of control consistent with § 63.8(c)(7)(i) and for responding to out of control periods consistent with §§ 63.8(c)(7)(ii) and (c)(8). v. On-going recordkeeping and reporting procedures, in accordance with the general requirements of §§ 63.10(c), (e)(1), and (e)(2)(i), or as specifically required under Subpart UUUUU.			
4.	*EGU Tune-up Report* Maintain on-site and submit, if requested by DES or EPA, an annual report containing the details of tune-ups conducted in accordance with Table 4, Item 12, including: a) The concentrations of CO and NOx in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems; b) A description of any corrective actions taken as a part of the combustion adjustment; and c) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period.	Maintain on site	SR4 & SR6	40 CFR 63.10021(e)

VIII. Reporting Requirements

The Owner or Operator shall be subject to the reporting requirements identified in Table 6:

Table 6 - Reporting Requirements

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
1.	*Notification of Compliance Status* Submit a Notification of Compliance Status (NOCS) report containing all the information specified below, as applicable. a) A description of the affected source(s) including identification of which subcategory the source is in, the design capacity of the source, a description of the add-on controls used on the source, description of the fuel(s) burned, and justification for the selection of fuel(s) burned during the performance test. b) Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance including all established operating limits. c) Identification of whether the facility is planning to demonstrate compliance with each applicable emission limit through performance testing, CEMS, or a sorbent trap monitoring system. d) Identification of whether the facility is planning to demonstrate compliance by emissions averaging. e) A signed certification that the facility has met all applicable emission limits and work practice standards. f) If there is a deviation from any emission limit, or work practice standard, submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation in the Notification of Compliance Status report. g) In addition to the information required in §63.9(h)(2), the notification of compliance status must include the following: i. Certifications of compliance, as applicable, and must be signed by a responsible official stating: A. ‘‘This EGU complies with the requirements in § 63.10021(a) to demonstrate continuous compliance.’’ and B. ‘‘No secondary materials that are solid waste were combusted in any affected	Within 60 days of completion of all performance tests and/or initial compliance demonstrations for the EGUs	SR4 & SR6	40 CFR §§ 63.9(h)(2)(ii), 63.10030(e) & 63.10031(f)(6)

Table 6 - Reporting Requirements				
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**
	unit.'' h) Identification of whether the facility will rely on paragraph (1) or (2) of the definition of startup in §63.10042. i) The NOCS must be submitted in writing to the Division. The NOCS must be submitted to EPA in electronic portable document format (PDF) using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. The data elements specified in § 63.10031(f)(6)(i) through (xii), as applicable, must be entered into the ECMPS Client Tool at the time of submission of the PDF file.			
2.	*Semi-annual MATS Compliance Report* a) A compliance report containing the following information shall be submitted to EPA and DES: i. The information required by the summary report located in 40 CFR 63.10(e)(3)(vi). ii. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semi-annual reporting period, including a description of the fuel and the total fuel usage amount with units of measure. iii. Indicate whether new types of fuel were burned during the reporting period. If a new type of fuel was burned, include the date of performance test where that fuel was in use. iv. Include the date of the most recent tune-up for each unit. v. Include the date of the most recent burner inspection if it was not done every 36 months and was delayed until the next scheduled unit shutdown. vi. If stack tests are conducted once every 3 years consistent with §63.10006(b), the date of the last three stack tests, a comparison of the emission level achieved in the last three stack tests to the 50 percent emission limit threshold required in § 63.10006(i), and a	Semi-annually received no later than July 31st and January 31st of each calendar year[10]	SR4 & SR6	40 CFR 63.10031 & Table 8 to Subpart UUUUU

[10] The first compliance report must cover the period from April 16, 2016 to June 30, 2016. Each subsequent compliance report must cover the semi-annual reporting period from January 1 through June 30 (report due by July 31st) or the semi-annual reporting period from July 1 through December 31 (report due by January 31st).

Table 6 - Reporting Requirements				
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**
	statement as to whether there have been any operational changes since the last stack test that could increase emissions. vii. For each instance of startup and shutdown: A. If CEMS is used for compliance purposes, include hourly average CEMS values and hourly average flow rates. Use units of milligrams per cubic meter for PM CEMS, micrograms per cubic meter for Hg CEMS, and ppmv for HCl CEMS. Use units of standard cubic meters per hour on a wet basis for flow rates. B. If a separate sorbent trap measurement system is used for startup or shutdown reporting periods, include hourly average mercury concentration in terms of micrograms per cubic meter. viii. If there are no deviations from any applicable emission limitation and there are no deviations from the requirements for work practice standards in Table 4, Item 8, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and ix. If a deviation from any emission limitation (emission limit and operating limit) or work practice standard occurred during the reporting period, the report must contain the information in § 63.10031(d). If there were periods during which the CMSs, including continuous emissions monitoring systems and continuous parameter monitoring systems, were out-of-control, as specified in § 63.8(c)(7), the report must contain the information in § 63.10031(e). b) For each excess emission occurring at an affected source where a CMS is used to comply			

Table 6 - Reporting Requirements				
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**
	with that emission limit, include the information required in § 63.10(e)(3)(v) in the compliance report specified in (a) above. c) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.			
3.	The compliance report required by Item 2 above must be submitted to EPA as follows: a.) Prior to April 16, 2017, in electronic portable document format using the Emissions Collection and Monitoring Plan System Client Tool. The data elements specified in § 63.10031(f)(6)(i) through (xii) must be entered into the ECMPS Client Tool at the time of submission of the PDF file. b.) On or after April 16, 2017, EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*).	Semi-annual	SR4 & SR6	40 CFR 63.10031(f)(4)
4.	*Performance Specification Testing for CMS* a.) DES shall be notified of the date or dates of any performance specification testing at least 30 days prior to the scheduled dates. b.) A written report summarizing the results of the testing shall be submitted to DES within 45 days of the completion of the test.	As specified	SR4 & SR6	Env-A 808.05
5.	*Submission of Test Reports to EPA* Submit the results of performance tests and each CEMS performance evaluation test required by Subpart UUUUU (within 60 days of completing each test) to EPA as follows: a.) Prior to April 16, 2017, in electronic portable document format using the ECMPS Client Tool. The data elements specified in § 63.10031(f)(6)(i) through (xii) must be entered into the ECMPS Client Tool at the time of submission of the PDF file. b.) On or after April 16, 2017, EPA's WebFIRE	As specified for each test	SR4 & SR6	40 CFR 63.100031(f)

Table 6 - Reporting Requirements				
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**
	database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*).			
6.	*Submission of QA/QC Plan* Submit the updated QA/QC plan (referenced in Table 5, Item 3) to DES within 45 days after conducting the performance specification testing of the CMS.	As specified	SR4 & SR6	Env-A 808.06