



west virginia department of environmental protection

**Appendix E:
Mitchell Consent Order CO-SIP-C-2017-04A (2016),
AEP Consent Decree, Civil Action No. C2-99-1250,
Permit R30-0510005-2014**

West Virginia Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

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west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

Austin Caperton, Cabinet Secretary
dep.wv.gov

**COMPLIANCE ORDER BY CONSENT
ISSUED UNDER THE
AIR POLLUTION CONTROL ACT
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 5, SECTION 4**

TO: Kentucky Power Company
Mitchell Power Station
c/o Debra L. Osborne
Vice President – Generation Assets
Suite 800, Laidley Tower
500 Lee Street East
Charleston, WV 25301

DATE: December 2, 2019
ORDER NO.: CO-SIP-C-2019-13
FACILITY ID NO.: 051-00005

INTRODUCTION

This Compliance Order is issued by consent between the Director of the Division of Air Quality (hereinafter, “Director”), under the authority of West Virginia Code, Chapter 22, Article 5, Section 1 et seq. and Kentucky Power Company (“Company”).

FINDINGS OF FACT

In support of this Order, the Director hereby finds the following:

1. Kentucky Power Company (“Kentucky Power”) operates the Mitchell Power Station (“Mitchell”), an electric generating station located near Moundsville, West Virginia in Marshall County. Mitchell includes two (2) coal-fired boilers, Unit 1 nominally rated at 8,590 MMBtu/hour at full load and Unit 2 nominally rated at 8,481 MMBtu/hr at full load, each venting through a separate flue, both contained within a common shell.
2. Kentucky Power has installed and certified and is required to operate and maintain an SO₂ continuous emissions monitoring system (CEMS) according to the requirements of 40 CFR Part 75 (Part 75) and meet the ongoing quality assurance requirements of Part 75.

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3. On June 22, 2010, the U.S. Environmental Protection Agency (USEPA) published a revised primary sulfur dioxide (SO₂) national ambient air quality standard (NAAQS), establishing a new 1-hour standard at a level of 75 parts per billion (ppb), based on a 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The effective date of the 2010 SO₂ NAAQS was August 23, 2010. [75 FR 35520]
4. On August 5, 2013, USEPA published designations for nonattainment areas in locations where existing air quality monitoring data from 2009-2011 indicated violations of the 2010 SO₂ NAAQS. The Clay, Franklin and Washington Tax Districts in Marshall County (“Marshall Area”) were designated as nonattainment. Designations were effective October 4, 2013. [78 FR 47191]
5. On April 15, 2015, the WV Department of Environmental Protection, Division of Air Quality (DAQ) submitted a clean data request for the Marshall Area based on air monitoring data certified in EPA’s Air Quality System (“AQS”) for the 2011-2013 period, with a design value of 59 ppb at the monitor on which the nonattainment designations were based.
6. On May 6, 2015, the DAQ submitted the 2011 Base Year SO₂ inventory for the Marshall Area, which included a total of 34,157 tons of SO₂, to USEPA as a Revision to the State Implementation Plan (SIP). Point source emissions accounted for 34,022 tons (99.6%) of the 2011 SO₂ emissions in the Marshall Area.
7. On July 31, 2015, the USEPA approved the 2011 Base Year Emissions Inventory for the Marshall Area for the 2010 1-hour SO₂ NAAQS by direct final rule [80 FR 45613].
8. In the 2011 base year SO₂ point source emissions inventory Mitchell accounted for 4,519 tons (13.28%), the Ohio Power Company’s Kammer plant (Kammer) accounted for 16,712 tons (49.12%), the PPG Industries, Inc. Natrium Plant (PPG) accounted for 6,759 tons (19.78%) and the Rain CII Carbon, LLC, Moundsville Calcining Plant (Rain Carbon) accounted for 6,031 tons (17.69%) of the total point source SO₂ emissions. Subsequent to 2011 Kammer and Rain Carbon permanently ceased operations, and PPG ceased burning coal and switched to burning natural gas, limiting their annual SO₂ emissions to 2.73 tons [R14-0027D]. Accordingly, by 2016, over 29,499 tons of SO₂ in the 2011 base inventory associated with point sources have been permanently removed from the inventory, reducing total SO₂ emissions in the inventory by over 75%.
9. On September 23, 2015, in a letter to Mr. William F. Durham, Director of the DAQ, the USEPA “determined that while the Marshall Area has three years of clean SO₂ data, the demonstration provided by the West Virginia Department of Environmental Protection is not sufficient to show that the monitor is located at the area of maximum concentration. Because of this, EPA believes it is not appropriate to make a determination of attainment

in accordance with the SO₂ clean data policy at this time.”

10. As of August 6, 2016, Mitchell is the only significant point source of SO₂ emissions that is currently operating in the Marshall Area.
11. On October 7, 2016, Kentucky Power submitted a protocol for the AERMOD air dispersion modeling to be used to demonstrate attainment with the 2010 SO₂ NAAQS.
12. On October 10, 2016, DAQ approved the protocol as submitted by Kentucky Power on October 7, 2016. Based on subsequent discussions with DAQ, the protocol was revised on November 30, 2016.
13. On December 12, 2016 Kentucky Power submitted AERMOD modeling results which demonstrate compliance with the 2010 1-hour SO₂ NAAQS with an hourly SO₂ emission rate of 0.60 lb SO₂/MMBtu, which equates to a total of 10,242.6 lb SO₂/hr from Mitchell Units 1 and 2.
14. On December 7, 2016, Kentucky Power submitted a statistical analysis demonstrating the comparable stringency of the 0.60 lb SO₂/MMBtu emission rate to a 30-operating day rolling average emission rate of 6,177.85 lb/hr from Mitchell Units 1 and 2.
15. On December 21, 2016, Kentucky Power and WVDEP entered into Consent Order CO-SIP-C-2016-31 which established a total maximum SO₂ emission limitation 6,175 lb/hr on a 30-operating day rolling average basis for Mitchell Units 1 and 2.
16. On March 14, 2017, Kentucky Power and WVDEP entered into Consent Order CO-SIP-C-2017-04A(2016), which superseded CO-SIP-C-2016-31.
17. On July 5, 2019, without conceding that its prior modeling demonstration was deficient in any way, Kentucky Power submitted an additional AERMOD dispersion modeling analysis to be used to demonstrate attainment with the 2010 SO₂ NAAQS.
18. On July 23, 2019, WVDEP submitted the additional modeling analysis to the United States Environmental Protection Agency (U.S. EPA) for review.
19. On August 23, 2019, U.S. EPA provided comments on the additional modeling analysis. WV DEP has addressed these comments and provided a response to the U.S. EPA via teleconference on September 24, 2019.
20. The July 5, 2019, additional AERMOD modeling analysis submitted by Kentucky Power demonstrates compliance with the 2010 1-hour SO₂ NAAQS at an hourly SO₂ emission rate of 0.31 lb SO₂/MMBtu, which equates to 5,222.08 lb SO₂/hr from Mitchell Units 1 and 2.

21. Applying the same statistical analysis as submitted December 7, 2016, the comparable stringency of the 0.31 lb SO₂/MMBtu emissions rate is a total of 3,149 lb SO₂/hr on a 30-operating day rolling average basis from Units 1 and 2

ORDER FOR COMPLIANCE

Now therefore, in accordance with Chapter 22, Article 5, Section 1 et seq. of the West Virginia Code, it is hereby agreed between the parties and ORDERED by the Director:

1. Beginning January 1, 2020, and thereafter, the SO₂ emissions from Mitchell Units 1 and 2 shall be limited to a total maximum of 3,149 lb/hr on a 30-operating day rolling average basis.
2. Kentucky Power shall use the CEMS installed, certified, operated and maintained in accordance with Part 75 to demonstrate compliance with the SO₂ emission limitations of this Consent Order. The compliance demonstration shall use only unadjusted, quality-assured SO₂ concentration values in the emissions calculations. Kentucky Power shall not apply bias adjustment factors to the Part 75 SO₂ data and shall not use Part 75 substitute data values.
3. Kentucky Power shall calculate and record a 30-operating day rolling average SO₂ emission rate in the units of the standard (lbs/hr), updated after each new boiler operating day. Each 30-operating day rolling average emission rate is the average of all of the valid hourly SO₂ emission rates in the 30-operating day period. The first 30-operating day rolling average shall be calculated for the period starting with the first operating day after the compliance date of the order and ending 30-operating days later.
4. Kentucky Power must operate the monitoring system and collect data at required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or 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. Kentucky Power is required to implement monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.
5. Kentucky Power shall report to the Director any exceedance of the 30-operating day rolling average SO₂ emission rate limit within five (5) business days after the exceedance occurs.
6. Kentucky Power shall submit semiannual compliance reports to the Director concerning emissions from Mitchell Units 1 and 2. The reporting periods shall be from January 1st to June 30th for the 1st half of the calendar year and July 1st to December 31st for the 2nd half of the year. The first semiannual report under this compliance agreement shall be submitted by August 14, 2020, covering the operating period January 1, 2020 through June

30, 2020. Subsequent semiannual compliance reports shall be submitted no later than the 45th day after the end of the reporting period. All reports shall be submitted electronically to the Director via email to DEPAirQualityReports@wv.gov. Such reports shall contain the following information:

- a. If a deviation from the 30-boiler operating day emission limit occurs, submit a brief description of the deviation, the duration of the deviation, and the cause of the deviation.
 - b. If there are no deviations from the 30-boiler operating day emission limitation, the semiannual compliance report shall include a statement that there were no deviations from the emission limitation during the reporting period.
 - c. A monitoring system performance report containing a summary of the monitoring system availability, expressed as a percentage of operating time for the reporting period.
 - d. Certification by a Responsible Official that the reported information is true, accurate, and complete, as required by 45 CSR 30-4.4.
7. Recordkeeping and Reporting specified under this compliance agreement shall be considered sufficient to meet 45 CSR 10 recordkeeping and reporting requirements, as they pertain to 45 CSR 10 SO₂ emission limitations.

OTHER PROVISIONS

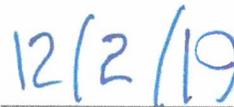
1. This Consent Order supersedes and replaces Consent Order CO-SIP-C-2017-04A(2016), which is hereby terminated and revoked as of January 1, 2020.
2. Kentucky Power hereby waives its right to appeal this Order under the provisions of Chapter 22, Article 5, Section 1 of the Code of West Virginia. Under this Order Kentucky Power agrees to take all actions required by the terms and conditions of this Order and consents to and will not contest the Director's jurisdiction regarding this Order. However, Kentucky Power does not admit to any factual and legal determinations made by the Director and reserves all rights and defenses available regarding liability or responsibility in any proceedings regarding matters other than proceedings, administrative or civil, to enforce this Order.
3. Compliance with the terms and conditions of this Order shall not in any way be construed as relieving Kentucky Power of the obligation to comply with any applicable law, permit, other order, or any other requirement otherwise applicable. Violations of the terms and conditions of this Order may subject Kentucky Power to penalties and injunctive relief in accordance with the applicable law.
4. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions to be invalid or unenforceable, all other provisions shall

remain in full force and effect.

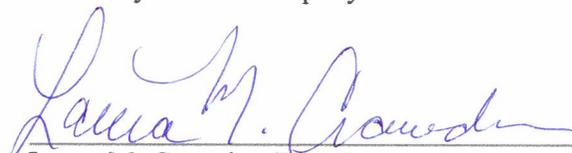
5. This Order is binding on Kentucky Power, its successors and assigns.



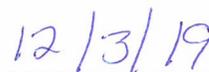
Debra L. Osborne, Vice President – Generation Assets
Kentucky Power Company



Date



Laura M. Crowder, Director
Division of Air Quality



Date

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CONSENT DECREE
CIVIL ACTION NO. C2-99-1250

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

UNITED STATES OF AMERICA)
)
 Plaintiff,)
)
 and)
)
 STATE OF NEW YORK, ET AL.,)
)
 Plaintiff-Intervenors,)
)
 v.)
)
 AMERICAN ELECTRIC POWER SERVICE)
)
 CORP., ET AL.,)
)
 Defendants.)
)

JUDGE EDMUND A. SARGUS, JR.
Magistrate Judge Terence P. Kemp

Civil Action No C2-99-1250
(Consolidated with C2-99-1182)

UNITED STATES OF AMERICA)
)
 Plaintiff,)
)
 v.)
)
 AMERICAN ELECTRIC POWER SERVICE)
)
 CORP., ET AL.,)
)
 Defendants.)
)

JUDGE GREGORY L. FROST
Magistrate Judge Norah McCann King

Civil Action No C2-05-360

OHIO CITIZEN ACTION, ET AL.,)	
)	
Plaintiffs,)	
)	
v.)	JUDGE GREGORY L. FROST
)	Magistrate Judge Norah McCann King
)	
AMERICAN ELECTRIC POWER SERVICE)	
CORP., ET AL.,)	Civil Action No. C2-04-1098
)	
Defendants.)	
)	

CONSENT DECREE

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Appendix A: Environmental Mitigation Projects

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Removal Efficiency for Conesville Units 5 and 6

WHEREAS, the following complaints have been filed against American Electric Power Service Corporation, Indiana Michigan Power Company, Ohio Power Company, Appalachian Power Company, Cardinal Operating Company, and Columbus Southern Power Company in the above-captioned cases, *United States, et al. v. American Electric Power Service Corp., et al.*, Civil Action Nos. C2-99-1182 and C2-99-1250 (“*AEP I*”) and *United States, et al. v. American Electric Power Service Corp., et al.*, Civil Action Nos. C2-04-1098 and C2-05-360 (“*AEP II*”):

(a) the United States of America (“United States”), on behalf of the United States Environmental Protection Agency (“EPA”), filed initial complaints on November 3, 1999 and April 8, 2005, and filed amended complaints on March 3, 2000 and September 17, 2004, pursuant to Sections 113(b), 165, and 167 of the Clean Air Act (the “Act”), 42 U.S.C. §§ 7413, 7475, and 7477;

(b) the States of New York, Connecticut, New Jersey, Vermont, New Hampshire, Maryland, and Rhode Island, and the Commonwealth of Massachusetts, after their motion to intervene was granted, filed initial complaints on December 14, 1999 and November 18, 2004, and filed amended complaints on April 5, 2000, September 24, 2002, and September 17, 2004, pursuant to Section 304 of the Act, 42 U.S.C. § 7604; and

(c) Ohio Citizen Action, Citizens Action Coalition of Indiana, Hoosier Environmental Council, Valley Watch, Inc., Ohio Valley Environmental Coalition, West Virginia Environmental Council, Clean Air Council, Izaak Walton League of America, United States Public Interest Research Group, National Wildlife Federation, Indiana Wildlife Federation, League of Ohio Sportsmen, Sierra Club, and Natural Resources Defense Council,

Inc. filed an initial complaint on November 19, 1999, and filed amended complaints on January 1, 2000 and September 16, 2004, pursuant to Section 304 of the Act, 42 U.S.C. § 7604;

WHEREAS, the complaints filed against Defendants in *AEP I* and *AEP II* sought injunctive relief and the assessment of civil penalties for alleged violations of, *inter alia*, the:

(a) Prevention of Significant Deterioration and Nonattainment New Source Review provisions in Part C and D of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, 7501-7515; and

(b) federally-enforceable state implementation plans developed by Indiana, Ohio, Virginia, and West Virginia;

WHEREAS, EPA issued notices of violation (“NOVs”) to Defendants with respect to such allegations on November 2, 1999, November 22, 1999, and June 18, 2004;

WHEREAS, EPA provided Defendants and the States of Indiana, Ohio, and West Virginia, and the Commonwealth of Virginia, with actual notice pertaining to Defendants’ alleged violations, in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C. § 7413(a)(1) and (b);

WHEREAS, in their complaints, the United States, the States, and Citizen Plaintiffs (collectively, the “Plaintiffs”) alleged, *inter alia*, that Defendants made major modifications to major emitting facilities, and failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide, nitrogen oxides, and/or particulate matter emissions, and further alleged that such emissions damage human health and the environment;

WHEREAS, the Plaintiffs' complaints state claims upon which relief can be granted against Defendants under Sections 113, 165, and 167 of the Act, 42 U.S.C. §§ 7413, 7475, and 7477, and 28 U.S.C. § 1355;

WHEREAS, Defendants have denied and continue to deny the violations alleged in the complaints and NOV's, maintain that they have been and remain in compliance with the Act and are not liable for civil penalties or injunctive relief, and state that they are agreeing to the obligations imposed by this Consent Decree solely to avoid the costs and uncertainties of litigation and to improve the environment;

WHEREAS, Defendants have installed and operated SCR technology on several Units in the AEP Eastern System, as those terms are defined herein, during the five (5) month ozone season to achieve emission reductions in compliance with the NO_x SIP Call;

WHEREAS, the Plaintiffs and Defendants anticipate that this Consent Decree, including the installation and operation of pollution control technology and other measures adopted pursuant to this Consent Decree, will achieve significant reductions of emissions from the AEP Eastern System and thereby significantly improve air quality;

WHEREAS, the liability phase of *AEP I* was tried on July 6-7, 2005, and July 11-12, 2005, and no decision has been rendered;

WHEREAS, the Parties have agreed, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length; that this settlement is fair, reasonable, and in the public interest, and consistent with the goals of the Act; and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

NOW, THEREFORE, without any admission by Defendants, and without adjudication of the violations alleged in the complaints or the NOV's, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, Sections 113, 167, and 304 of the Act, 42 U.S.C. §§ 7413, 7477, and 7604. Solely for the purposes of this Consent Decree, venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying complaints, and for no other purpose, Defendants waive all objections and defenses that they may have to the Court's jurisdiction over this action, to the Court's jurisdiction over Defendants, and to venue in this District. Defendants shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Solely for the purposes of the complaints filed by the Plaintiffs in this matter and resolved by the Consent Decree, for the purposes of entry and enforcement of this Consent Decree, and for no other purpose, Defendants waive any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Plaintiffs and Defendants. Except as provided in Section XXV (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice. To facilitate entry of this Consent Decree, upon the Date of Lodging of this Consent Decree the Parties shall file a Joint Motion to Consolidate *AEP I* and *AEP II* so that *AEP II* is consolidated into *AEP I*.

II. APPLICABILITY

2. Upon entry, the provisions of the Consent Decree shall apply to and be binding upon and inure to the benefit of Plaintiffs and Defendants, and their respective successors and assigns, and upon their officers, employees, and agents, solely in their capacities as such.

3. Defendants shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Defendants shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. For this reason, in any action to enforce this Consent Decree, Defendants shall not assert as a defense the failure of their officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless Defendants establish that such failure resulted from a Force Majeure Event, as defined in Paragraph 158 of this Consent Decree.

III. DEFINITIONS

Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.

4. A “1-hour Average NO_x Emission Rate” for a re-powered gas-fired, electric generating unit means, and shall be expressed as, the average concentration in parts per million

(“ppm”) by dry volume, corrected to 15% O₂, as averaged over one (1) hour. In determining the 1-Hour Average NO_x Emission Rate, Defendants shall use CEMS in accordance with applicable reference methods specified in 40 C.F.R. Part 60 to calculate the emissions for each 15-minute interval within each clock hour, except as provided in this Paragraph. Compliance with the 1-Hour Average NO_x Emission Rate shall be shown by averaging all 15-minute CEMS interval readings within a clock hour, except that any 15-minute CEMS interval that contains any part of a startup or shutdown shall not be included in the calculation of that 1-Hour average. A minimum of two 15-minute CEMS interval readings within a clock hour, not including startup or shutdown intervals, is required to determine compliance with the 1-Hour average NO_x Emission Rate. All emissions recorded by CEMS shall be reported in 1-Hour averages.

5. A “30-Day Rolling Average Emission Rate” for a Unit means, and shall be expressed as, a lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to the Unit in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown, and Malfunction within an Operating Day, except as follows:

- a. Emissions and BTU inputs that occur during a period of Malfunction shall be excluded from the calculation of the 30-Day Rolling Average Emission

Rate if Defendants provide notice of the Malfunction to EPA in accordance with Paragraph 159 in Section XIV (Force Majeure) of this Consent Decree;

- b. Emissions of NO_x and BTU inputs that occur during the fifth and subsequent Cold Start Up Period(s) that occur at a given Unit during any 30-day period shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate if inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emission Rate and Defendants have installed, operated, and maintained the SCR in question in accordance with manufacturers' specifications and good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any Fossil Fuel) for a period of six (6) hours or more. The NO_x emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the lesser of (i) those NO_x emissions emitted during the eight (8) hour period commencing when the Unit is synchronized with a utility electric distribution system and concluding eight (8) hours later, or (ii) those NO_x emissions emitted prior to the time that the flue gas has achieved the minimum SCR operational temperature specified by the catalyst manufacturer; and
- c. For SO₂, shall include all emissions and BTUs commencing from the time the Unit is synchronized with a utility electric distribution system through

the time that the Unit ceases to combust fossil fuel and the fire is out in the boiler.

6. A “30-Day Rolling Average Removal Efficiency” means, for SO₂, at a Unit other than Conesville Unit 5 and Conesville Unit 6, the percent reduction in the mass of SO₂ achieved by a Unit’s FGD system over a 30-Operating Day period and shall be calculated as follows: step one, sum the total pounds of SO₂ emitted as measured at the outlet of the FGD system for the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the outlet of the FGD system for that Unit; step two, sum the total pounds of SO₂ delivered to the inlet of the FGD system for the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the inlet to the FGD system for that Unit; step three, subtract the outlet SO₂ emissions calculated in step one from the inlet SO₂ emissions calculated in step two; step four, divide the remainder calculated in step three by the inlet SO₂ emissions calculated in step two; and step five, multiply the quotient calculated in step four by 100 to express as a percentage of removal efficiency. A new 30-day Rolling Average Removal Efficiency shall be calculated for each new Operating Day, and shall include all emissions that occur during all periods within each Operating Day except that emissions that occur during a period of Malfunction may be excluded from the calculation if Defendants provide Notice of the Malfunction to Plaintiffs in accordance with Section XIV (Force Majeure) and it is determined to be a Force Majeure Event pursuant to that Section.

7. “AEP Eastern System” means, solely for purposes of this Consent Decree, the following coal-fired, electric steam generating Units (with the nominal nameplate net capacity of each Unit):

- a. Amos Unit 1 (800 MW), Amos Unit 2 (800 MW), and Amos Unit 3 (1300 MW) located in St. Albans, West Virginia;
- b. Big Sandy Unit 1 (260 MW) and Big Sandy Unit 2 (800 MW) located in Louisa, Kentucky;
- c. Cardinal Unit 1 (600 MW), Cardinal Unit 2 (600 MW), and Cardinal Unit 3 (630 MW) located in Brilliant, Ohio;
- d. Clinch River Unit 1 (235 MW), Clinch River Unit 2 (235 MW), and Clinch River Unit 3 (235 MW) located in Carbo, Virginia;
- e. Conesville Unit 1 (125 MW), Conesville Unit 2 (125 MW), Conesville Unit 3 (165 MW), Conesville Unit 4 (780 MW), Conesville Unit 5 (375 MW), and Conesville Unit 6 (375 MW) located in Conesville, Ohio;
- f. Gavin Unit 1 (1300 MW) and Gavin Unit 2 (1300 MW) located in Cheshire, Ohio;
- g. Glen Lyn Unit 5 (95 MW) and Glen Lyn Unit 6 (240 MW) located in Glen Lyn, Virginia;
- h. Kammer Unit 1 (210 MW), Kammer Unit 2 (210 MW), and Kammer Unit 3 (210 MW) located in Moundsville, West Virginia;
- i. Kanawha River Unit 1 (200 MW) and Kanawha River Unit 2 (200 MW) located in Glasgow, West Virginia;
- j. Mitchell Unit 1 (800 MW) and Mitchell Unit 2 (800 MW) located in Moundsville, West Virginia;
- k. Mountaineer Unit 1 (1300 MW) located in New Haven, West Virginia;

- l. Muskingum River Unit 1 (205 MW), Muskingum River Unit 2 (205 MW), Muskingum River Unit 3 (215 MW), Muskingum River Unit 4 (215 MW), and Muskingum River Unit 5 (585 MW) located in Beverly, Ohio;
- m. Picway Unit 9 (100 MW) located in Lockbourne, Ohio;
- n. Rockport Unit 1 (1300 MW) and Rockport Unit 2 (1300 MW) located in Rockport, Indiana;
- o. Sporn Unit 1 (150 MW), Sporn Unit 2 (150 MW), Sporn Unit 3 (150 MW), Sporn Unit 4 (150), and Sporn Unit 5 (450 MW) located in New Haven, West Virginia; and
- p. Tanners Creek Unit 1 (145 MW), Tanners Creek Unit 2 (145 MW), Tanners Creek Unit 3 (205 MW), and Tanners Creek Unit 4 (500 MW) located in Lawrenceburg, Indiana.

8. “Boiler Island” means: a Unit’s (a) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (b) combustion air system; (c) steam generating system (firebox, boiler tubes, and walls); and (d) draft system (excluding the stack), all as further described in “Interpretation of Reconstruction,” by John B. Rasnic, U.S. EPA (November 25, 1986) and attachments thereto.

9. “CEMS” or “Continuous Emission Monitoring System” means, for obligations involving NO_x and SO₂ under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and installed and maintained as required by 40 C.F.R. Part 75.

10. “Citizen Plaintiffs” means, collectively, Ohio Citizen Action, Citizens Action Coalition of Indiana, Hoosier Environmental Council, Ohio Valley Environmental Coalition,

West Virginia Environmental Council, Clean Air Council, Izaak Walton League of America, United States Public Interest Research Group, National Wildlife Federation, Indiana Wildlife Federation, League of Ohio Sportsmen, Sierra Club, and Natural Resources Defense Council, Inc.

11. “Clean Air Act” or “Act” means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.

12. “Clean Air Interstate Rule” or “CAIR” means the regulations promulgated by EPA on May 12, 2005, at 70 Fed. Reg. 25,161, which are entitled, “Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to NO_x SIP Call; Final Rule,” and any subsequent amendments to that regulation, and any applicable, federally-approved state implementation plan or the federal implementation plan to implement CAIR.

13. “Consent Decree” or “Decree” means this Consent Decree and the appendices attached hereto, which are incorporated into this Consent Decree.

14. “Continuously Operate” or “Continuous Operation” means that when an SCR, FGD, ESP, or Other NO_x Pollution Controls are used at a Unit, except during a Malfunction, they shall be operated at all times such Unit is in operation, consistent with the technological limitations, manufacturers’ specifications, and good engineering and maintenance practices for such equipment and the Unit so as to minimize emissions to the greatest extent practicable.

15. “Date of Entry” means the date this Consent Decree is approved or signed by the United States District Court Judge; provided, however, that if the Parties’ Joint Motion to Consolidate, as specified in Paragraph 1, is denied or not decided, then the “Date of Entry”

means the date that the last of the two United States District Court Judges hearing these cases approves or signs this Consent Decree.

16. “Date of Lodging” means the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Southern District of Ohio.

17. “Day” means, unless otherwise specified, calendar day.

18. “Defendants” or “AEP” means American Electric Power Service Corporation, Kentucky Power Company d/b/a American Electric Power, Indiana Michigan Power Company d/b/a American Electric Power, Ohio Power Company d/b/a American Electric Power, Cardinal Operating Company and its owners (Ohio Power and Buckeye Power, Inc.), Appalachian Power Company d/b/a American Electric Power, and Columbus Southern Power Company d/b/a American Electric Power.

19. “Eastern System-Wide Annual Tonnage Limitation” means the limitations, as specified in this Consent Decree, on the number of tons of the air pollutants that may be emitted from the AEP Eastern System during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the air pollutants emitted during all periods of startup, shutdown, and Malfunction, except that emissions that occur during a period of Malfunction may be excluded from the calculation if Defendants provide Notice of the Malfunction to Plaintiffs in accordance with Section XIV (Force Majeure) and it is determined to be a Force Majeure Event pursuant to that Section.

20. “Emission Rate” means the number of pounds of pollutant emitted per million BTU of heat input (“lb/mmBTU”), measured in accordance with this Consent Decree.

21. “EPA” means the United States Environmental Protection Agency.

22. “ESP” means electrostatic precipitator, a pollution control device for the reduction of PM.

23. “Environmental Mitigation Project” means a project funded or implemented by Defendants as a remedial measure to mitigate alleged damage to human health or the environment, including National Parks or Wilderness Areas, claimed to have been caused by the alleged violations described in the complaints or to compensate Plaintiffs for costs necessitated as a result of the alleged damages.

24. “Existing Unit” means a Unit that commenced operation prior to the Date of Lodging of this Consent Decree.

25. “Flue Gas Desulfurization System,” or “FGD,” means a pollution control device with one or more absorber vessels that employs flue gas desulfurization technology for the reduction of SO₂.

26. “Fossil Fuel” means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.

27. An “Improved Unit” for NO_x means an AEP Eastern System Unit equipped with an SCR or scheduled under this Consent Decree to be equipped with an SCR, or required to be Retired, Retrofitted, or Re-powered. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for another. Any Other Unit in the AEP Eastern System can become an Improved Unit for NO_x if it is equipped with an SCR and the requirement to Continuously Operate such SCR is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and the Title V Permit applicable to that Unit.

28. An “Improved Unit” for SO₂ means an AEP Eastern System Unit equipped with an FGD or scheduled under this Consent Decree to be equipped with an FGD, or required to be Retired, Retrofitted, or Re-powered. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for another. Any Other Unit in the AEP Eastern System can become an Improved Unit for SO₂ if it is equipped with an FGD and the requirement to Continuously Operate such FGD is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and the Title V Permit applicable to that Unit.

29. “KW” means kilowatt or one thousand watts.

30. “lb/mmBTU” means one pound per million British thermal units.

31. “Malfunction” means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.

32. “MW” means a megawatt or one million watts.

33. “NSR Permit” means a preconstruction permit issued by the permitting authority pursuant to Parts C or D of Subchapter I of the Clean Air Act.

34. “National Ambient Air Quality Standards” or “NAAQS” means national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.

35. “New and Newly Permitted Unit” means a Unit that commenced operation after the Date of Lodging of this Consent Decree, and that has been issued a final NSR Permit for SO₂ and NO_x that includes applicable Best Available Control Technology (“BACT”) and/or Lowest

Achievable Emission Rate (“LAER”) limitations, as those terms are respectively defined at 42 U.S.C. §§ 7479(3), 7501(3).

36. “Nonattainment NSR” means the nonattainment area New Source Review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, and its regulations, 40 C.F.R. Part 51.

37. “NO_x” means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.

38. “NO_x Allowance” means an authorization to emit a specified amount of NO_x that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or a state implementation plan.

39. “NO_x CAIR Allocations” means the number of NO_x Allowances allocated to the AEP Eastern System Units pursuant to the Clean Air Interstate Rule, excluding any NO_x Allowances awarded by Indiana, Kentucky, Ohio, West Virginia, and Virginia to an AEP Eastern System Unit from the “compliance supplement pool,” as that phrase is defined at 40 C.F.R. § 96.143, in a federally-approved state implementation plan, or federal implementation plan to implement CAIR.

40. “Operating Day” means any day on which a Unit fires Fossil Fuel.

41. “Other NO_x Pollution Controls” means the measures identified in the table in Paragraph 69 that will achieve reductions in NO_x emissions at the Units specified therein.

42. “Other SO₂ Measures” means the measures identified in Paragraph 90 that will achieve reductions in SO₂ emissions at the Units specified therein.

43. “Other Unit” means any Unit of the AEP Eastern System that is not an Improved Unit for the pollutant in question.

44. “Operational or Ownership Interest” means part or all of Defendants’ legal or equitable operational or ownership interests in any Unit in the AEP Eastern System.

45. “Parties” means the United States, the States, the Citizen Plaintiffs, and Defendants. “Party” means one of the Parties.

46. “Plaintiffs” means the United States, the States, and the Citizen Plaintiffs.

47. “Plant-Wide Annual Rolling Tonnage Limitation for SO₂ at Clinch River” means the sum of the tons of SO₂ emitted during all periods of operation from the Clinch River plant, including, without limitation, all SO₂ emitted during periods of startup, shutdown, and Malfunction, in the most recent month and the previous eleven (11) months. A new Annual Rolling Average Tonnage Limitation for years 2010 through 2014, and for 2015 and continuing thereafter, shall be calculated in accordance with Paragraph 88.

48. “Plant-Wide Annual Tonnage Limitation for SO₂ at Kammer” means the sum of the tons of SO₂ emitted during all periods of operation from the Kammer plant, including, without limitation, all SO₂ emitted during periods of startup, shutdown, and Malfunction, during the relevant calendar year (i.e., January 1 through December 31). A new Plant-Wide Annual Tonnage Limitation shall be calculated for each new calendar year.

49. “PM” means particulate matter, as measured in accordance with the provisions of this Consent Decree.

50. “PM CEMS” or “PM Continuous Emission Monitoring System” means the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic or paper record of PM emissions.

51. “PM Emission Rate” means the number of pounds of PM emitted per million BTU of heat input (lb/mmBTU), as measured in annual stack tests in accordance with EPA Method 5, 5B, or 17, 40 C.F.R. Part 60, including Appendix A.

52. “Project Dollars” means Defendants’ expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section VIII (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section VIII (Environmental Mitigation Projects) and Appendix A of this Consent Decree, and (b) constitute Defendants’ direct payments for such projects, or Defendants’ external costs for contractors, vendors, and equipment.

53. “PSD” means Prevention of Significant Deterioration within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, and its regulations, 40 C.F.R. Part 52.

54. “Re-power” means either (1) the replacement of an existing pulverized coal boiler through the construction of a new circulating fluidized bed (“CFB”) boiler or other technology of equivalent environmental performance that at a minimum achieves and maintains a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBTU or a 30-Day Rolling Average Removal Efficiency of at least ninety-five percent (95%) for SO₂ and a 30-Day Rolling Average Emission Rate not greater than 0.070 lb/mmBTU for NO_x; or (2) the modification of

such Unit, or removal and replacement of Unit components, such that the modified or replaced Unit generates electricity through the use of new combined cycle combustion turbine technology fueled by natural gas containing no more than 0.5 grains of sulfur per 100 standard cubic feet of natural gas, and at a minimum, achieves a 1-hour Average NO_x Emission Rate not greater than 2.0 ppm.

55. “Retire” means that Defendants shall: (a) permanently shut down and cease to operate the Unit; and (b) comply with any state and/or federal requirements applicable to that Unit. Defendants shall amend any applicable permits so as to reflect the permanent shutdown status of such Unit.

56. “Retrofit” means that the Unit must install and Continuously Operate both an SCR and an FGD. For the 600 MW listed in the table in Paragraph 68 and 87, “Retrofit” means that the Unit must meet a federally-enforceable 30-Day Rolling Average Emission Rate of 0.100 lb/mmBTU for NO_x and a 30-Day Rolling Average Emission Rate of 0.100 lb/mmBTU for SO₂, measured in accordance with the requirements of this Consent Decree.

57. “Selective Catalytic Reduction System” or “SCR” means a pollution control device that employs selective catalytic reduction technology for the reduction of NO_x emissions.

58. “Selective Non-Catalytic Reduction” means a pollution control device for the reduction of NO_x emissions that utilizes ammonia or urea injection into the boiler.

59. “SO₂” means sulfur dioxide, as measured in accordance with the provisions of this Consent Decree.

60. “SO₂ Allowance” means “allowance” as defined at 42 U.S.C. § 7651a(3): “an authorization, allocated to an affected unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide.”

61. “SO₂ Allocations” means the number of SO₂ Allowances allocated to the AEP Eastern System Units.

62. “Super-Compliant NO_x Allowance” means an allowance attributable to reductions beyond the requirements of this Consent Decree as determined in accordance with Paragraph 80.

63. “Super-Compliant SO₂ Allowance” means an allowance attributable to reductions beyond the requirements of this Consent Decree as determined in accordance with Paragraph 98.

64. “States” means the States of Connecticut, Maryland, New Hampshire, New Jersey, New York, Rhode Island, and Vermont, and the Commonwealth of Massachusetts.

65. “Title V Permit” means the permit required for Defendants’ major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.

66. “Unit” means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine, and boiler, and all ancillary equipment, including pollution control equipment. An electric steam generating station may comprise one or more Units.

IV. NO_x EMISSION REDUCTIONS AND CONTROLS

A. Eastern System-Wide Annual Tonnage Limitations for NO_x.

67. Notwithstanding any other provisions of this Consent Decree, except Section XIV (Force Majeure), during each calendar year specified in the table below, all Units in the AEP

Eastern System, collectively, shall not emit NO_x in excess of the following Eastern System-Wide Annual Tonnage Limitations:

Calendar Year	Eastern System-Wide Annual Tonnage Limitations for NO_x
2009	96,000 tons
2010	92,500 tons
2011	92,500 tons
2012	85,000 tons
2013	85,000 tons
2014	85,000 tons
2015	75,000 tons
2016, and each year thereafter	72,000 tons

B. NO_x Emission Limitations and Control Requirements.

68. No later than the dates set forth in the table below, Defendants shall install and Continuously Operate SCR on each Unit identified therein, or, if indicated in the table, Retire, Retrofit, or Re-power such Unit:

Unit	NO_x Pollution Control	Date
Amos Unit 1	SCR	January 1, 2008
Amos Unit 2	SCR	January 1, 2009
Amos Unit 3	SCR	January 1, 2008
Big Sandy Unit 2	SCR	January 1, 2009
Cardinal Unit 1	SCR	January 1, 2009
Cardinal Unit 2	SCR	January 1, 2009

Unit	NO_x Pollution Control	Date
Cardinal Unit 3	SCR	January 1, 2009
Conesville Unit 1	Retire, Retrofit, or Re-power	Date of Entry of this Consent Decree
Conesville Unit 2	Retire, Retrofit, or Re-power	Date of Entry of this Consent Decree
Conesville Unit 3	Retire, Retrofit, or Re-power	December 31, 2012
Conesville Unit 4	SCR	December 31, 2010
Gavin Unit 1	SCR	January 1, 2009
Gavin Unit 2	SCR	January 1, 2009
Mitchell Unit 1	SCR	January 1, 2009
Mitchell Unit 2	SCR	January 1, 2009
Mountaineer Unit 1	SCR	January 1, 2008
Muskingum River Units 1-4	Retire, Retrofit, or Re-power	December 31, 2015
Muskingum River Unit 5	SCR	January 1, 2008
Rockport Unit 1	SCR	December 31, 2017
Rockport Unit 2	SCR	December 31, 2019
Sporn Unit 5	Retire, Retrofit, or Re-power	December 31, 2013
A total of at least 600 MW from the following list of Units: Sporn Units 1-4, Clinch River Units 1-3, Tanners Creek Units 1-3, and/or Kammer Units 1-3	Retire, Retrofit, or Re-power	December 31, 2018

69. Other NO_x Pollution Controls. No later than the dates set forth in the table below, Defendants shall Continuously Operate the Other NO_x Pollution Controls on the Units identified therein:

Unit	Other NO_x Pollution Controls	Date
Big Sandy Unit 1	Low NO _x Burners	Date of Entry
Glen Lyn Units 5 and 6	Low NO _x Burners	Date of Entry
Clinch River Units 1, 2, and 3	Low NO _x Burners, and Selective Non-catalytic Reduction	For Low NO _x Burners, Date of Entry, and, for Selective Non-Catalytic Reduction, December 31, 2009
Conesville Units 5 and 6	Low NO _x Burners	Date of Entry
Kammer Units 1, 2, and 3	Overfire Air	Date of Entry
Kanawha River Units 1 and 2	Low NO _x Burners	Date of Entry
Picway Unit 9	Low NO _x Burners	Date of Entry
Tanners Creek Units 1, 2, and 3	Low NO _x Burners	Date of Entry
Tanners Creek Unit 4	Overfire Air	Date of Entry

C. General Provisions for Use and Surrender of NO_x Allowances.

70. Except as may be necessary to comply with this Section and Section XIII (Stipulated Penalties), Defendants may not use NO_x Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation or Eastern System-Wide Annual Tonnage Limitation required by this Decree, by using, tendering,

or otherwise applying NO_x Allowances to achieve compliance or offset any emissions above the limits specified in this Consent Decree.

71. As required by this Section IV of this Consent Decree, Defendants shall surrender NO_x Allowances that would otherwise be available for sale, trade, or transfer as a result of actions taken by Defendants to comply with the requirements of this Consent Decree.

72. NO_x Allowances allocated to the AEP Eastern System may be used by Defendants to meet their own federal and/or state Clean Air Act regulatory requirements for the Units included in the AEP Eastern System. Subject to Paragraph 70, nothing in this Consent Decree shall prevent Defendants from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with their own federal and/or state Clean Air Act requirements to the extent otherwise allowed by law.

73. The requirements in this Consent Decree pertaining to Defendants' use and surrender of NO_x Allowances are permanent injunctions not subject to any termination provision of this Consent Decree. These provisions shall survive any termination of this Consent Decree.

D. Use of Excess NO_x Allowances.

74. Calculation of Unrestricted and Restricted NO_x Allowances. On an annual basis, beginning in 2009, Defendants shall calculate the difference between the NO_x CAIR Allocations for the Units in the AEP Eastern System for that year and the annual Eastern System-Wide Tonnage Limitations for NO_x for that calendar year. This difference represents the total Excess NO_x Allowances for that calendar year. For purposes of this Consent Decree, for each year commencing in 2009 and ending in 2015, forty-two percent (42%) of the Excess NO_x Allowances shall be Unrestricted Excess NO_x Allowances and fifty-eight percent (58%) shall be

Restricted Excess NO_x Allowances. Commencing in 2016, and continuing thereafter, all Excess NO_x Allowances shall be Restricted Excess NO_x Allowances.

75. Use and Surrender of Unrestricted Excess NO_x Allowances. For each calendar year commencing in 2009 and ending in 2015, Defendants may use Unrestricted Excess NO_x Allowances in any manner authorized by law. No later than March 1, 2016, Defendants must surrender, or transfer to a non-profit third party selected by Defendants for surrender, all unused Unrestricted Excess NO_x Allowances subject to surrender accumulated during the period from 2009 through 2015.

76. Use and Surrender of Restricted Excess NO_x Allowances. Beginning in calendar year 2009, and for each calendar year thereafter, Defendants shall calculate the difference between the number of any Restricted Excess NO_x Allowances and the number of NO_x Allowances that is equal to the amount of actual NO_x emissions from: (a) any New and Newly Permitted Unit as defined in this Consent Decree, and (b) the following five natural-gas plants but only up to a cumulative total of 1200 tons of NO_x in any single year: Ceredo Generating Station located near Ceredo, West Virginia, with a nominal generating capacity of 505 megawatts; Waterford Energy Center located in southeastern Ohio, with a nominal generating capacity of 821 megawatts; Darby Electric Generating Station located near Columbus, Ohio, with a nominal generating capacity of 480 megawatts; Lawrenceburg Generating Station located in Lawrenceburg, Indiana, with a generating capacity of 1,096 megawatts; and a natural gas-fired power plant under construction near Dresden, Ohio, with a nominal generating capacity of 580 megawatts. This difference shall be the amount of Restricted Excess NO_x Allowances

potentially subject to surrender in 2016. During calendar years 2009 through 2015, Defendants may accumulate Restricted Excess NO_x Allowances potentially subject to surrender in 2016.

77. NO_x Allowances from Renewable Energy. Beginning in calendar year 2009, and for each calendar year thereafter, Defendants may subtract from the number of Restricted Excess NO_x Allowances potentially subject to surrender, a number of allowances calculated in accordance with this Paragraph. To calculate such number, Defendants shall use the following method: multiply 0.0002 by the sum of (a) the actual annual generation in MWH/year generated from solar or wind power projects first owned or operated by Defendants after the Date of Lodging of this Consent Decree, and (b) the actual annual generation in MWH/year purchased by Defendants from solar or wind power projects in any year after the Date of Lodging of this Consent Decree. Such figure so calculated shall be subtracted from the number of Restricted Excess NO_x Allowances potentially subject to surrender each year. The remainder shall be the Restricted Excess NO_x Allowances subject to surrender.

78. Defendants may, solely at their discretion, use Restricted Excess NO_x Allowances at a New and Newly Permitted Unit for which Defendants have received a final NSR Permit from the permitting agency even if the NSR Permit has been appealed but not stayed during the permit appeal process. If Defendants use Restricted Excess NO_x Allowances at such New and Newly Permitted Unit, and the emissions from such New and Newly Permitted Unit are greater than what such Unit is permitted to emit after final adjudication of the appeal process, Defendants shall, within thirty (30) days of such final adjudication, retire an amount of NO_x Allowances equal to the number of tons of NO_x actually emitted that exceeded the finally adjudicated permit limit.

79. No later than March 1, 2016, the total number of Restricted Excess NO_x Allowances subject to surrender accumulated during 2009 through 2015 as calculated in accordance with Paragraphs 74, 76, and 77, shall be surrendered or transferred to a non-profit third party selected by Defendants for surrender, pursuant to Subsection F, below. Beginning in calendar year 2016, and for each calendar year thereafter, the total number of Restricted Excess NO_x Allowances subject to surrender for that year calculated in accordance with Paragraph 74, 76 and 77, shall be surrendered, or transferred to a non-profit third party selected by Defendants for surrender, by March 1 of the following calendar year.

E. Super-Compliant NO_x Allowances.

80. In each calendar year beginning in 2009, and continuing thereafter, Defendants may use in any manner authorized by law any NO_x Allowances made available in that year as a result of maintaining actual NO_x emissions from the AEP Eastern System below the Eastern System-Wide Annual Tonnage Limitations for NO_x under this Consent Decree for each calendar year. Defendants shall timely report the generation of such Super-Compliant NO_x Allowances in accordance with Section XI (Periodic Reporting) and Appendix B of this Consent Decree.

F. Method for Surrender of Excess NO_x Allowances.

81. For purposes of this Consent Decree, the “surrender” of Excess Restricted or Unrestricted Excess NO_x Allowances subject to surrender means permanently surrendering to EPA NO_x Allowances from the accounts administered by EPA so that such NO_x Allowances can never be used thereafter to meet any compliance requirement under the Clean Air Act, a state implementation plan, or this Consent Decree.

82. For all Restricted or Unrestricted Excess NO_x Allowances subject to surrender required to be surrendered to EPA in Paragraphs 79 and 75, above, Defendants or the third party recipient(s) (as the case may be) shall first submit a NO_x Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such NO_x Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Defendants or the third party recipient(s) shall irrevocably authorize the transfer of these NO_x Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the NO_x Allowances being surrendered.

83. If any NO_x Allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, Defendants shall include a description of such transfer in the next report submitted to EPA as required by Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (a) identify the non-profit third party recipient(s) of the NO_x Allowances and list the serial numbers of the transferred NO_x Allowances; and (b) include a certification by the third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the NO_x Allowances and will not use any of the NO_x Allowances to meet any obligation imposed by any environmental law. No later than the second periodic report due after the transfer of any NO_x Allowances, Defendants shall include a statement that the third party recipient(s) surrendered the NO_x Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 82 within one (1) year after Defendants transferred the NO_x Allowances to them. Defendants shall not have complied with the NO_x Allowance

surrender requirements of this Paragraph until all third party recipient(s) have actually surrendered the transferred NO_x Allowances to EPA.

G. Reporting Requirements for NO_x Allowances.

84. Defendants shall comply with the reporting requirements for NO_x Allowances as described in Section XI (Periodic Reporting) and Appendix B.

H. General NO_x Provisions.

85. To the extent a NO_x Emission Rate is required under this Consent Decree, Defendants shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75 to determine such Emission Rate.

V. SO₂ EMISSION REDUCTIONS AND CONTROLS

A. Eastern System-Wide Annual Tonnage Limitations for SO₂.

86. Notwithstanding any other provisions of this Consent Decree, except Section XIV (Force Majeure), during each calendar year specified in the table below, all Units in the AEP Eastern System, collectively, shall not emit SO₂ in excess of the following Eastern System-Wide Annual Tonnage Limitations:

Calendar Year	Eastern System-Wide Annual Tonnage Limitations for SO₂
2010	450,000 tons
2011	450,000 tons
2012	420,000 tons
2013	350,000 tons
2014	340,000 tons

Calendar Year	Eastern System-Wide Annual Tonnage Limitations for SO₂
2015	275,000 tons
2016	260,000 tons
2017	235,000 tons
2018	184,000 tons
2019, and each year thereafter	174,000 tons

B. SO₂ Emission Limitations and Control Requirements.

87. No later than the dates set forth in the table below, Defendants shall install and Continuously Operate an FGD on each Unit identified therein, or, if indicated in the table, Retire, Retrofit, or Re-power such Unit:

Unit	SO₂ Pollution Control	Date
Amos Units 1 and 3	FGD	December 31, 2009
Amos Unit 2	FGD	December 31, 2010
Big Sandy Unit 2	FGD	December 31, 2015
Cardinal Units 1 and 2	FGD	December 31, 2008
Cardinal Unit 3	FGD	December 31, 2012
Conesville Units 1 and 2	Retire, Retrofit, or Re-power	Date of Entry
Conesville Unit 3	Retire, Retrofit, or Re-power	December 31, 2012
Conesville Unit 4	FGD	December 31, 2010
Conesville Unit 5	Upgrade existing FGD and meet a 95% 30-day Rolling Average Removal Efficiency	December 31, 2009

Unit	SO₂ Pollution Control	Date
Conesville Unit 6	Upgrade existing FGD and meet a 95% 30-day Rolling Average Removal Efficiency	December 31, 2009
Gavin Units 1 and 2	FGD	Date of Entry
Mitchell Units 1 and 2	FGD	December 31, 2007
Mountaineer Unit 1	FGD	December 31, 2007
Muskingum River Units 1-4	Retire, Retrofit, or Re-power	December 31, 2015
Muskingum River Unit 5	FGD	December 31, 2015
Rockport Unit 1	FGD	December 31, 2017
Rockport Unit 2	FGD	December 31, 2019
Sporn Unit 5	Retire, Retrofit, or Re-power	December 31, 2013
A total of at least 600 MW from the following list of Units: Sporn Units 1-4, Clinch River Units 1-3, Tanners Creek Units 1-3, and/or Kammer Units 1-3	Retire, Retrofit, or Re-power	December 31, 2018

88. Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River.

Beginning on January 1, 2010, and continuing through December 31, 2014, Defendants shall limit their total annual SO₂ emissions at the Clinch River plant to a Plant-Wide Annual Rolling Average Tonnage Limitation of 21,700 tons. Beginning on January 1, 2015, and continuing thereafter, Defendants shall limit their total annual SO₂ emissions at the Clinch River plant to a Plant-Wide Annual Rolling Average Tonnage Limitation of 16,300 tons. For purposes of calculating the Plant-Wide Annual Rolling Average Tonnage Limitation that begins in 2010, Defendants shall use the period beginning January 1, 2010 through December 31, 2010 to

establish the initial annual period that is subject to the Plant-Wide Annual Rolling Average Tonnage Limitation for 2010 through 2014. Defendants shall then calculate a new Plant-Wide Annual Rolling Average Tonnage Limitation each month thereafter through December 31, 2014, by averaging the most recent month with the previous eleven (11) months. For purposes of calculating the Plant-Wide Annual Rolling Average Tonnage Limitation that begins in 2015, Defendants shall use the period beginning January 1, 2015 through December 31, 2015 to establish the initial annual period that is subject to the Plant-Wide Annual Average Rolling Tonnage Limitation for 2015. Defendants shall then calculate a new Plant-Wide Annual Rolling Average Tonnage Limitation each month thereafter by averaging the most recent month with the previous eleven (11) months.

89. Plant-Wide Annual Tonnage Limitation for SO₂ at Kammer. Beginning on January 1, 2010, and continuing annually thereafter, Defendants shall limit their total annual SO₂ emissions at the Kammer plant to a Plant-Wide Annual Tonnage Limitation of 35,000 tons.

90. Other SO₂ Measures. No later than the dates set forth in the table below, Defendants shall comply with the limit on coal sulfur content for such Units, at all times that the Units are in operation:

Unit	Other SO₂ Measures	Date
Big Sandy Unit 1	Units can only burn coal with a sulfur content no greater than 1.75 lb/mmBTU on an annual average basis	Date of Entry
Glen Lyn Units 5 and 6	Units can only burn coal with a sulfur content no greater than 1.75 lb/mmBTU on an annual average basis.	Date of Entry

Unit	Other SO₂ Measures	Date
Kanawha River Units 1 and 2	Units can only burn coal with a sulfur content no greater than 1.75 lb/mmBTU on an annual average basis	Date of Entry
Tanners Creek Units 1, 2, and 3	Units can only burn coal with a sulfur content no greater than 1.2 lb/mmBTU on an annual average basis	Date of Entry
Tanners Creek Unit 4	Unit can only burn coal with a sulfur content no greater than 1.2 % on an annual average basis	Date of Entry

C. Use and Surrender of SO₂ Allowances.

91. Defendants may use SO₂ Allowances allocated to the AEP Eastern System by the Administrator of EPA under the Act, or by any state under its state implementation plan, to meet their own federal and/or state regulatory requirements for the Units included in the AEP Eastern System. Subject to Paragraph 92, nothing in this Consent Decree shall prevent Defendants from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with their own federal and/or state Clean Air Act requirements to the extent otherwise allowed by law.

92. Except as may be necessary to comply with this Section and Section XIII (Stipulated Penalties), Defendants may not use any SO₂ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation, Eastern System-Wide Annual Tonnage Limitations, Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River, or Plant-Wide Annual Tonnage Limitation

for SO₂ at Kammer required by this Consent Decree by using, tendering, or otherwise applying SO₂ Allowances to achieve compliance or offset any emissions above the limits specified in this Consent Decree.

93. On an annual basis beginning in 2010, and continuing thereafter, Defendants shall calculate the number of Excess SO₂ Allowances by subtracting the number of SO₂ Allowances equal to the annual Eastern System-Wide Tonnage Limitations for SO₂ for each calendar year times the applicable allowance surrender ratio from the annual SO₂ Allocations for all Units within the AEP Eastern System for the same calendar year. Defendants shall surrender, or transfer to a non-profit third party selected by Defendants for surrender, all Excess SO₂ Allowances that have been allocated to the AEP Eastern System for the specified calendar year by the Administrator of EPA under the Act or by any state under its state implementation plan. Defendants shall make the surrender of SO₂ Allowances required by this Paragraph to EPA by March 1 of the immediately following calendar year.

D. Method for Surrender of Excess SO₂ Allowances.

94. For purposes of this Subsection, the “surrender” of Excess SO₂ Allowances means permanently surrendering allowances from the accounts administered by EPA so that such allowances can never be used thereafter to meet any compliance requirement under the Clean Air Act, a state implementation plan, or this Consent Decree.

95. If any SO₂ Allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, Defendants shall include a description of such transfer in the next report submitted to EPA pursuant to Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (i) identify the non-profit third party recipient(s) of the SO₂

Allowances and list the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the second periodic report due after the transfer of any SO₂ Allowances, Defendants shall include a statement that the third party recipient(s) surrendered the SO₂ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 96 within one (1) year after Defendants transferred the SO₂ Allowances to them. Defendants shall not have complied with the SO₂ Allowance surrender requirements of this Paragraph until all third party recipient(s) have actually surrendered the transferred SO₂ Allowances to EPA.

96. For all SO₂ Allowances surrendered to EPA, Defendants or the third party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Defendants or the third party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the SO₂ Allowances being surrendered.

97. The requirements in this Consent Decree pertaining to Defendants' surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Decree. These provisions shall survive any termination of this Consent Decree in whole or in part.

E. Super-Compliant SO₂ Allowances.

98. In each calendar year beginning in 2010, and continuing thereafter, Defendants may use in any manner authorized by law any SO₂ Allowances made available in that year as a result of maintaining actual SO₂ emissions from the AEP Eastern System below the Eastern System-Wide Annual Tonnage Limitations for SO₂ under this Consent Decree for each calendar year. Defendants shall timely report the generation of such Super-Compliant SO₂ Allowances in accordance with Section XI (Periodic Reporting) and Appendix B of this Consent Decree.

F. Reporting Requirements for SO₂ Allowances.

99. Defendants shall comply with the reporting requirements for SO₂ Allowances as described in Section XI (Periodic Reporting) and Appendix B.

G. General SO₂ Provisions.

100. To the extent an Emission Rate or 30-Day Rolling Average Removal Efficiency for SO₂ is required under this Consent Decree, Defendants shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75 to determine such Emission Rate.

101. Notwithstanding Paragraphs 6 and 100, the 30-Day Rolling Average Removal Efficiency for SO₂ at Conesville Unit 5 and Conesville Unit 6 shall be determined in accordance with Appendix C.

VI. PM EMISSION REDUCTIONS AND CONTROLS

A. Optimization of Existing ESPs.

102. Beginning thirty (30) days after the Date of Entry, and continuing thereafter, Defendants shall Continuously Operate each ESP on Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5 to maximize PM emission reductions at all times when the Unit is in

operation, provided that such operation of the ESP is consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the ESP. Defendants shall, at a minimum, to the extent reasonably practicable: (a) fully energize each section of the ESP for each unit, and repair any failed ESP section at the next planned Unit outage (or unplanned outage of sufficient length); (b) operate automatic control systems on each ESP to maximize PM collection efficiency; (c) maintain power levels delivered to the ESPs, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering practices; and (d) inspect for and repair during the next planned Unit outage (or unplanned outage of sufficient length) any openings in ESP casings, ductwork, and expansion joints to minimize air leakage.

B. PM Emission Rate and Testing.

103. No later than the dates specified in the table below, Defendants shall Continuously Operate each Unit specified therein to achieve and maintain a PM Emission Rate no greater than 0.030 lb/mmBTU:

Unit	Date to Achieve and Maintain PM Emission Rate
Cardinal Unit 1	December 31, 2009
Cardinal Unit 2	December 31, 2009
Muskingum River Unit 5	December 31, 2012

104. On or before the date established by this Consent Decree for Defendants to achieve and maintain 0.030 lb/mmBTU at Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5, Defendants shall conduct a performance test for PM that demonstrates compliance with the PM Emission Rate required by this Consent Decree. Within forty-five (45) days of each such performance test, Defendants shall submit the results of the performance test to Plaintiffs pursuant to Section XVIII (Notices) of this Consent Decree.

C. PM Emissions Monitoring.

105. Beginning in calendar year 2010 for Cardinal Unit 1 and Cardinal Unit 2, and calendar year 2013 for Muskingum River Unit 5, and continuing in each calendar year thereafter, Defendants shall conduct a stack test for PM on each stack servicing Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5. The annual stack test requirement imposed by this Paragraph may be satisfied by stack tests conducted by Defendants as required by their permits from the State of Ohio for any year that such stack tests are required under the permits.

106. The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, 5B, or 17, or an alternative method that is promulgated by EPA, requested for use herein by Defendants, and approved for use herein by EPA. Use of any particular method shall conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. § 60.48Da(b) and (e), or any federally-approved method contained in the Ohio State Implementation Plan. Defendants shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA within forty-five (45) days of completion of each test.

D. Installation and Operation of PM CEMS.

107. Defendants shall install, calibrate, operate, and maintain PM CEMS, as specified below. Each PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units of lb/mmBTU. Defendants shall maintain, in an electronic database, the hourly average emission values produced by all PM CEMS in lb/mmBTU. Defendants shall use reasonable efforts to keep each PM CEMS running and producing data whenever any Unit served by the PM CEMS is operating.

108. No later than December 31, 2011, Defendants shall submit to EPA pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree: (a) a plan for the installation and certification of each PM CEMS, and (b) a proposed Quality Assurance/Quality Control (“QA/QC”) protocol that shall be followed in calibrating such PM CEMS. In developing both the plan for installation and certification of the PM CEMS and the QA/QC protocol, Defendants shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Appendix F, Procedure 3. Following approval by EPA of the protocol, Defendants shall thereafter operate each PM CEMS in accordance with the approved protocol.

109. No later than the dates specified below, Defendants shall install, certify, and operate PM CEMS on the stacks or common stacks for Cardinal Unit 1, Cardinal Unit 2, and a third Unit, as further described in Paragraph 110:

Stack	Date to Commence Operation of PM CEMS
Cardinal Unit 1	December 31, 2012
Cardinal Unit 2	December 31, 2012
Unit to be identified pursuant to Paragraph 110	December 31, 2012

110. No later than December 31, 2011, Defendants shall identify, subject to Plaintiffs' approval, the third Unit required by Paragraph 109.

111. No later than ninety (90) days after Defendants begin operation of the PM CEMS, Defendants shall conduct tests of each PM CEMS to demonstrate compliance with the PM CEMS installation and certification plan submitted to and approved by EPA.

112. Demonstration that PM CEMS are Infeasible. Defendants shall operate the PM CEMS for at least two (2) years on each of the Units specified in Paragraphs 109 and 110. After two (2) years of operation, Defendants may attempt to demonstrate that it is infeasible to continue operating PM CEMS. As part of such demonstration, Defendants shall submit an alternative PM monitoring plan for review and approval by EPA. The plan shall explain the basis for stopping operation of the PM CEMS and propose an alternative PM monitoring plan. If the United States disapproves the alternative PM monitoring plan, or if the United States rejects Defendants' claim that it is infeasible to continue operating PM CEMS, such disagreement is subject to Section XV (Dispute Resolution).

113. "Infeasible to Continue Operating PM CEMS" Standard. Operation of a PM CEMS shall be considered no longer feasible if: (a) the PM CEMS cannot be kept in proper

condition for sufficient periods of time to produce reliable, adequate, or useful data consistent with the QA/QC protocol, or (b) Defendants demonstrate that recurring, chronic, or unusual equipment adjustment or servicing needs in relation to other types of continuous emission monitors cannot be resolved through reasonable expenditures of resources. If EPA determines that Defendants have demonstrated pursuant to this Paragraph that operation is no longer feasible, Defendants shall be entitled to discontinue operation of and remove the PM CEMS.

114. PM CEMS Operations Will Continue During Dispute Resolution or Proposals for Alternative Monitoring. Until EPA approves an alternative monitoring plan, or until the conclusion of any proceeding under Section XV (Dispute Resolution), Defendants shall continue to operate the PM CEMS. If EPA has not issued a decision regarding an alternative monitoring plan within 120 days, Defendants may initiate action under Section XV (Dispute Resolution).

E. PM Reporting.

115. Defendants shall comply with the reporting requirements for PM as described in Section XI (Periodic Reporting) and Appendix B.

F. General PM Provisions.

116. Although stack testing shall be used to determine compliance with the PM Emission Rate established by this Consent Decree, data from the PM CEMS shall be used, at a minimum, to monitor progress in reducing PM emissions.

VII. PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

117. Emission reductions that result from actions required to be taken by Defendants after the Date of Entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit or offset under the Clean Air Act's Nonattainment NSR and PSD programs.

118. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by a State or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

VIII. ENVIRONMENTAL MITIGATION PROJECTS

119. Defendants shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Consent Decree and fund the categories of Projects described in Subsection B, below, in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree. In funding and/or implementing all such Projects in Appendix A and Subsection B, Defendants shall expend moneys and/or implement Projects valued at no less than \$36 million for the Projects identified in Appendix A and \$24 million for the payments to the States to fund Projects within the categories set forth in Subsection B. Defendants shall fund and/or implement such Projects over a period of no later than five (5) years from the Date of Entry. Defendants may propose establishing one or more qualified settlement funds within the meaning of Treas. Reg. §1.468B-1 in conjunction with one or more

Mitigation Projects. Any such trust would be established pursuant to a trust agreement in a form to be mutually agreed upon by the affected Parties. Nothing in the foregoing is intended by the United States to be a determination or opinion regarding whether such trust would meet the requirements of Treas. Reg. §1.468B-1 or is otherwise appropriate.

A. Requirements for Projects Described in Appendix A (\$36 million).

120. Defendants shall maintain, and present to EPA upon request, all documents to substantiate the Project Dollars expended to implement the Projects described in Appendix A, and shall provide these documents to EPA within thirty (30) days of a request for the documents.

121. All plans and reports prepared by Defendants pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from Defendants without charge.

122. Defendants shall certify, as part of each plan submitted to EPA for any Project, that Defendants are not otherwise required by law to perform the Project described in the plan, that Defendants are unaware of any other person who is required by law to perform the Project, and that Defendants will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable portfolio standards.

123. Defendants shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.

124. If Defendants elect (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of Defendants, but not including Defendants' agents or contractors, that person or instrumentality

must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which Defendants contribute the funds. Regardless of whether Defendants elect (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, Defendants acknowledge that they will receive credit for the expenditure of such funds as Project Dollars only if Defendants demonstrate that the funds have been actually spent by either Defendants or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.

125. Defendants shall comply with the reporting requirements for Appendix A Projects as described in Section XI (Periodic Reporting) and Appendix B.

126. Within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), Defendants shall submit to the United States a report that documents the date that the Project was completed, Defendants' results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Defendants in implementing the Project.

B. Mitigation Projects to be Conducted by the States (\$24 million).

127. The States, by and through their respective Attorneys General, shall jointly submit to Defendants Projects within the categories identified in this Subsection B for funding in amounts not to exceed \$4.8 million per calendar year for no less than five (5) years following the Date of Entry of this Consent Decree beginning as early as calendar year 2008. The funds for these Projects will be apportioned by and among the States, and Defendants shall not have approval rights for the Projects or the apportionment. Defendants shall pay proceeds as

designated by the States in accordance with the Projects submitted for funding each year within seventy-five (75) days after being notified in writing by the States. Notwithstanding the \$4.8 million and 5-year limitation above, if the total costs of the projects submitted in any one or more years are less than \$4.8 million, the difference between that amount and \$4.8 million will be available for funding by Defendants of new or previously submitted projects in the following years, except that all amounts not designated by the States within ten (10) years after the Date of Entry of this Consent Decree shall expire.

128. Categories of Projects. The States agree to use money funded by Defendants to implement Projects that pertain to energy efficiency and/or pollution reduction. Such projects may include, but are not limited by, the following:

- a. Retrofitting land and marine vehicles (e.g., automobiles, off-road and on-road construction and other vehicles, trains, ferries) and transportation terminals and ports, with pollution control devices, such as particulate matter traps, computer chip reflashing, and battery hybrid technology;
- b. Truck-stop and marine port electrification;
- c. Purchase and installation of photo-voltaic cells on buildings;
- d. Projects to conserve energy use in new and existing buildings, including appliance efficiency improvement projects, weatherization projects, and projects intended to meet EPA's Green Building guidelines (see <http://www.epa.gov/greenbuilding/pubs/enviro-issues.htm>) and/or the Leadership in Energy and Environmental Design (LEED) Green Building Rating System (see <http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>), and projects to

collect information in rental markets to assist in design of efficiency and conservation programs;

- e. Construction associated with the production of energy from wind, solar, and biomass;
- f. “Buy back” programs for dirty old motors (e.g., automobile, lawnmowers, landscape equipment);
- g. Programs to remove and/or replace oil-fired home heating equipment to allow use of ultra-low sulfur oil, and outdoor wood-fired boilers;
- h. Purchase and retirement of SO₂ and NO_x allowances; and
- i. Funding program to improve modeling of mobile source sector.

IX. CIVIL PENALTY

129. Within thirty (30) days after the Date of Entry, Defendants shall pay to the United States a civil penalty in the amount of \$15,000,000. The civil penalty shall be paid by Electronic Funds Transfer (“EFT”) to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 1999v01542 and DOJ Case Number 90-5-2-1-06893 and the civil action case name and consolidated case numbers of this action. The costs of such EFT shall be Defendants’ responsibility. Payment shall be made in accordance with instructions provided to Defendants by the Financial Litigation Unit of the U.S. Attorney’s Office for the Southern District of Ohio. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, Defendants shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and consolidated case numbers, to the Department of Justice and to EPA in accordance with Section XVIII (Notices) of this Consent Decree.

130. Failure to timely pay the civil penalty shall subject Defendants to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Defendants liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.

131. Payment made pursuant to this Section is a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and is not a tax-deductible expenditure for purposes of federal law.

X. RESOLUTION OF CIVIL CLAIMS AGAINST DEFENDANTS

A. Resolution of the United States' Civil Claims.

132. Claims Based on Modifications Occurring Before the Date of Lodging of this Consent Decree. Entry of this Decree shall resolve all civil claims of the United States against Defendants that arose from any modifications commenced at any AEP Eastern System Unit prior to the Date of Lodging of this Consent Decree, including but not limited to, those modifications alleged in the Notices of Violation and complaints filed in *AEP I* and *AEP II*, under any or all of: (a) Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515; (b) Section 111 of the Clean Air Act, 42 U.S.C. § 7411, and 40 C.F.R. § 60.14; (c) the federally-approved and enforceable Indiana State Implementation Plan, Kentucky State Implementation Plan, Ohio State Implementation Plan, Virginia State Implementation Plan, and West Virginia State Implementation Plan; or (d) Sections 502(a) and 504(a) of Title V of the Clean Air Act, 42 U.S.C §§ 7611(a) and 7611(c), but only to the extent that such claims are based on Defendants' failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111 of the Clean Air Act.

133. Claims Based on Modifications after the Date of Lodging of This Consent Decree. Entry of this Consent Decree also shall resolve all civil claims of the United States against Defendants that arise based on a modification commenced before December 31, 2018, or solely for Rockport Unit 2, before December 31, 2019, for all pollutants, except Particulate Matter, regulated under Parts C or D of Subchapter I of the Clean Air Act, and under regulations promulgated thereunder, as of the Date of Lodging of this Consent Decree, and:

- a. where such modification is commenced at any AEP Eastern System Unit after the Date of Lodging of this Consent Decree; or
- b. where such modification is one this Consent Decree expressly directs Defendants to undertake.

The term “modification” as used in this Paragraph shall have the meaning that term is given under the Clean Air Act and under the regulations in effect as of the Date of Lodging of this Consent Decree, as alleged in the complaints in *AEP I* and *AEP II*.

134. Reopener. The resolution of the United States’ civil claims against Defendants, as provided by this Subsection A, is subject to the provisions of Subsection B of this Section.

B. Pursuit by the United States of Civil Claims Otherwise Resolved by Subsection

A.

135. Bases for Pursuing Resolved Claims for the AEP Eastern System. If Defendants violate: (a) the Eastern System-Wide Annual Tonnage Limitations for NO_x required pursuant to Paragraph 67; (b) the Eastern System-Wide Annual Tonnage Limitations for SO₂ required pursuant to Paragraph 86; or (c) operate a Unit more than ninety (90) days past a date established in this Consent Decree without completing the required installation, upgrade, or commencing Continuous Operation of any emission control device required pursuant to Paragraphs 68, 69, 87, 102, and 103 then the United States may pursue any claim at any AEP Eastern System Unit that is otherwise resolved under Subsection A (Resolution of United States' Civil Claims), subject to (a) and (b) below.

- a. For any claims based on modifications undertaken at any Unit in the AEP Eastern System that is not an Improved Unit for the pollutant in question, claims may be pursued only where the modification(s) on which such claim is based was commenced within the five (5) years preceding the violation or failure specified in this Paragraph.
- b. For any claims based on modifications undertaken at an Improved Unit, claims may be pursued only where the modification(s) on which such claim is based was commenced: (1) after the Date of Lodging of this Consent Decree and (2) within the five (5) years preceding the violation or failure specified in this Paragraph.

136. Additional Bases for Pursuing Resolved Claims for Modifications at an Improved Unit. Solely with respect to an Improved Unit, the United States may also pursue claims arising

from a modification (or collection of modifications) at an Improved Unit that has otherwise been resolved under Subsection A (Resolution of the United States' Civil Claims) if the modification (or collection of modifications) at the Improved Unit on which such claim is based (a) was commenced after the Date of Lodging of this Consent Decree and (b) individually (or collectively) increased the maximum hourly emission rate of that Unit for NO_x or SO₂ (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%).

137. Any Other Unit can become an Improved Unit for NO_x if (a) it is equipped with an SCR, and (b) the operation of such SCR is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and incorporated into a Title V permit applicable to that Unit. Any Other Unit can become an Improved Unit for SO₂ if (a) it is equipped with an FGD, and (b) the operation of such FGD is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and incorporated into a Title V permit applicable to that Unit.

138. Additional Bases for Pursuing Resolved Claims for Modifications at Other Units.

a. Solely with respect to Other Units, i.e., a Unit that is not an Improved Unit under the terms of this Consent Decree, the United States may also pursue claims arising from a modification (or collection of modifications) at an Other Unit that has otherwise been resolved under Subsection A (Resolution of the United States' Civil Claims), if the modification (or collection of modifications) at the Other Unit on which the claim is based was commenced within the five (5) years preceding any of the following events:

1. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging of this Consent Decree increases the maximum hourly

emission rate for such Other Unit for the relevant pollutant (NO_x or SO₂) (as measured by 40 C.F.R. § 60.14(b) and (h));

2. the aggregate of all Capital Expenditures made at such Other Unit exceed \$125/KW on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 7) during the period from the Date of Entry of this Consent Decree through December 31, 2015. (Capital Expenditures shall be measured in calendar year 2007 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or

3. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging of this Consent Decree results in an emissions increase of NO_x and/or SO₂ at such Other Unit, and such increase: (i) presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. §7603; (ii) causes or contributes to violation of a NAAQS in any Air Quality Control Area that is in attainment with that NAAQS; (iii) causes or contributes to violation of a PSD increment; or (iv) causes or contributes to any adverse impact on any formally-recognized air quality and related values in any Class I area. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under Subparagraphs (3)(ii) or (3)(iii) of this Paragraph, to pursue any claim for a modification at an Other Unit resolved under Subparagraph A of this Section.

b. Solely with respect to Other Units at the plant listed below, the United States may also pursue claims arising from a modification (or collection of modifications) at such Other Units commenced after the Date of Lodging of this Consent Decree if such modification (or collection of modifications) results in an emissions increase of SO₂ at such Other Unit, and such increase causes the emissions at the plant at issue to exceed the Plant-Wide Annual Rolling

Average Tonnage Limitation for SO₂ at Clinch River listed in the table below for year 2010-2014 and/or 2015 and beyond:

<u>Plant</u>	<u>Year</u>	<u>SO₂ Tons Limit</u>
Clinch River	2010 - 2014	21,700
Clinch River	2015 and each year thereafter	16,300

C. Resolution of Past Claims of the States and Citizen Plaintiffs and Reservation of Rights.

139. The States and Citizen Plaintiffs agree that this Consent Decree resolves all civil claims that have been alleged in their respective complaints or could have been alleged against Defendants prior to the Date of Lodging of this Consent Decree for violations of: (a) Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and (b) Section 111 of the Act, 42 U.S.C. § 7411, and 40 C.F.R § 60.14, at Units within the AEP Eastern System.

140. The States and Citizen Plaintiffs expressly do not join in giving the Defendants the covenant provided by the United States through Paragraph 133 of this Consent Decree, do not release any claims under the Clean Air Act and its implementing regulations arising after the Date of Lodging of this Consent Decree, and reserve their rights, if any, to bring any actions against the Defendants pursuant to 42 U.S.C. § 7604 for any claims arising after the Date of Lodging of this Consent Decree.

141. Notwithstanding Paragraph 140, the States and Citizen Plaintiffs release Defendants from any civil claim that may arise under the Clean Air Act for Defendants' performance of activities that this Consent Decree expressly directs Defendants to undertake,

except to the extent that such activities would cause a significant increase in the emission of a criteria pollutant other than SO₂, NO_x, or PM.

142. Retention of Authority Regarding NAAQS Exceedences. Nothing in this Consent Decree shall be construed to affect the authority of the United States or any state under applicable federal statutes or regulations and applicable state statutes or regulations to impose appropriate requirements or sanctions on any Unit in the AEP Eastern System, including, but not limited to, the Units at the Clinch River plant, if the United States or a state determines that emissions from any Unit in the AEP Eastern System result in violation of, or interfere with the attainment and maintenance of, any ambient air quality standard.

XI. PERIODIC REPORTING

143. Beginning on March 31, 2008, and continuing annually thereafter on March 31 until termination of this Consent Decree, and in addition to any other express reporting requirement in this Consent Decree, Defendants shall submit to the United States, the States, and the Citizen Plaintiffs a progress report in compliance with Appendix B of this Consent Decree.

144. In any periodic progress report submitted pursuant to this Section, Defendants may incorporate by reference information previously submitted under their Title V permitting requirements, provided that Defendants attach the Title V permit report, or the relevant portion thereof, and provide a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.

145. In addition to the progress reports required pursuant to this Section, Defendants shall provide a written report to the United States, the States, and the Citizen Plaintiffs of any violation of the requirements of this Consent Decree within fifteen (15) days of when Defendants knew or should have known of any such violation. In this report, Defendants shall explain the

cause or causes of the violation and all measures taken or to be taken by Defendants to prevent such violations in the future.

146. Each report shall be signed by Defendants' Vice President of Environmental Services or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

147. If any SO₂ or NO_x Allowances are surrendered to any third party pursuant to this Consent Decree, the third party's certification pursuant to Paragraphs 83 and 95 shall be signed by a managing officer of the third party and shall contain the following language:

I certify under penalty of law that, _____ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XII. REVIEW AND APPROVAL OF SUBMITTALS

148. Defendants shall submit each plan, report, or other submission required by this Consent Decree to the Plaintiffs specified, whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree. The Plaintiff(s) to whom the report is submitted, as required, may approve the submittal or decline to approve it and provide written comments explaining the bases for declining such approval as soon as reasonably practicable. Such Plaintiff(s) will endeavor to coordinate their comments into one document when explaining their bases for declining such approval. Within sixty (60) days of receiving written comments from any of the Plaintiff(s), Defendants shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to the Plaintiff(s); or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XV (Dispute Resolution) of this Consent Decree.

149. Upon receipt of Plaintiffs' or Plaintiff's (as the case may be) final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, Defendants shall implement the approved submittal in accordance with the schedule specified therein.

XIII. STIPULATED PENALTIES

150. For any failure by Defendants to comply with the terms of this Consent Decree, and subject to the provisions of Sections XIV (Force Majeure) and XV (Dispute Resolution), Defendants shall pay, within thirty (30) days after receipt of written demand to Defendants by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified)
a. Failure to pay the civil penalty as specified in Section IX (Civil Penalty) of this Consent Decree	\$10,000 per day
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, Emission Rate for PM, or Other SO ₂ Measures where the violation is less than 5% in excess of the limits set forth in this Consent Decree	\$2,500 per day per violation
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, Emission Rate for PM, or Other SO ₂ Measures where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree	\$5,000 per day per violation
d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, Emission Rate for PM, or Other SO ₂ Measures where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree	\$10,000 per day per violation

Consent Decree Violation	Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified)
e. Failure to comply with the Eastern System-Wide Annual Tonnage Limitation for SO ₂	\$5,000 per ton for the first 1000 tons, and \$10,000 per ton for each additional ton above 1000 tons, plus the surrender, pursuant to the procedures set forth in Paragraphs 82 and 83, of NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
f. Failure to comply with the Plant-Wide Annual Rolling Tonnage Limitation for SO ₂ at Clinch River	\$40,000 per ton, plus the surrender, pursuant to the procedures set forth in Paragraphs 95 and 96, of SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
g. Failure to comply with the Eastern System-Wide Annual Tonnage Limitation for NO _x	\$5,000 per ton for the first 1000 tons, and \$10,000 per ton for each additional ton above 1000 tons, plus the surrender, pursuant to the procedures set forth in Paragraphs 82 and 83, of NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
h. Failure to install, commence operation, or Continuously Operate a pollution control device required under this Consent Decree	\$10,000 per day per violation during the first 30 days, \$32,500 per day per violation thereafter
i. Failure to Retire, Retrofit, or Re-power a Unit by the date specified in this Consent Decree	\$10,000 per day per violation during the first 30 days, \$32,500 per day per violation thereafter

Consent Decree Violation	Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified)
j. Failure to install or operate CEMS as required in this Consent Decree	\$1,000 per day per violation
k. Failure to conduct performance tests of PM emissions, as required in this Consent Decree	\$1,000 per day per violation
l. Failure to apply for any permit required by Section XVI (Permits)	\$1,000 per day per violation
m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required in this Consent Decree	\$750 per day per violation during the first ten days, \$1,000 per day per violation thereafter
n. Using NO _x Allowances except as permitted by Paragraphs 75, 76, and 78	The surrender of NO _x Allowances in an amount equal to four times the number of NO _x Allowances used in violation of this Consent Decree
o. Failure to surrender NO _x Allowances as required by Paragraphs 75 and 79	(a) \$32,500 per day plus (b) \$7,500 per NO _x Allowance not surrendered
p. Failure to surrender SO ₂ Allowances as required by Paragraph 93	(a) \$32,500 per day plus (b) \$1,000 per SO ₂ Allowance not surrendered
q. Failure to demonstrate the third party surrender of an SO ₂ Allowance or NO _x Allowance in accordance with Paragraphs 95-96 and 82-83.	\$2,500 per day per violation
r. Failure to implement any of the Environmental Mitigation Projects described in Appendix A in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree	The difference between the cost of the Project, as identified in Appendix A, and the dollars Defendants spent to implement the Project

Consent Decree Violation	Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified)
s. Failure to fund an Environmental Mitigation Project, as submitted by the States, in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree	\$1,000 per day per violation during the first 30 days, \$5,000 per day per violation thereafter
t. Failure to Continuously Operate required Other NO _x Pollution Controls required in Paragraph 69	\$10,000 per day during the first 30 days, and \$32,500 each day thereafter
u. Failure to comply with the Plant-Wide Annual Tonnage Limitation for SO ₂ at Kammer	\$40,000 per ton, plus the surrender, pursuant to the procedures set forth in Paragraphs 95 and 96 of SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
v. Any other violation of this Consent Decree	\$1,000 per day per violation

151. Violation of an Emission Rate or 30-Day Rolling Average Removal Efficiency that is based on a 30-Day Rolling Average is a violation on every day on which the average is based. Where a violation of a 30-Day Rolling Average Emission Rate or 30-Day Rolling Average Removal Efficiency (for the same pollutant and from the same source) recurs within periods of less than thirty (30) days, Defendants shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.

152. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.

153. Defendants shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to Defendants from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless Defendants elect within twenty (20) days of receipt of written demand to Defendants from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XV (Dispute Resolution) of this Consent Decree.

154. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 152 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:

- a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XV (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of Plaintiffs' decision;
- b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, Defendants shall, within sixty (60) days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;

- c. If the Court's decision is appealed by any Party, Defendants shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the Plaintiffs and Defendants, or determined by the Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 150.

155. All stipulated penalties shall be paid in the manner set forth in Section IX (Civil Penalty) of this Consent Decree.

156. Should Defendants fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.

157. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to Plaintiffs by reason of Defendants' failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, Defendants shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XIV. FORCE MAJEURE

158. For purposes of this Consent Decree, including, but not limited to, Paragraphs 67 and 86, a “Force Majeure Event” shall mean an event that has been or will be caused by circumstances beyond the control of Defendants or any entity controlled by Defendants that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite Defendants’ best efforts to fulfill the obligation. “Best efforts to fulfill the obligation” include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.

159. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which Defendants intend to assert a claim of Force Majeure, Defendants shall notify the Plaintiffs in writing as soon as practicable, but in no event later than twenty-one (21) business days following the date Defendants first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, Defendants shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by Defendants to prevent or minimize the delay or violation, the schedule by which Defendants propose to implement those measures, and Defendants’ rationale for attributing a delay or violation to a Force Majeure Event. Defendants shall adopt all reasonable measures to avoid or minimize such delays or violations. Defendants shall be deemed to know of any circumstance which Defendants or any entity controlled by Defendants knew or should have known.

160. Failure to Give Notice. If Defendants materially fail to comply with the notice requirements of this Section, the Plaintiffs may void Defendants' claim for Force Majeure as to the specific event for which Defendants have failed to comply with such notice requirement.

161. Plaintiffs' Response. The Plaintiffs shall notify Defendants in writing regarding Defendants' claim of Force Majeure as soon as reasonably practicable. If the Plaintiffs agree that a delay in performance has been or will be caused by a Force Majeure Event, the Parties shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event, or the extent to which Defendants may be relieved of stipulated penalties or other remedies provided under the terms of this Consent Decree. Such agreement shall be reduced to writing, and signed by all Parties. If the agreement results in a material change to the terms of this Consent Decree, an appropriate modification shall be made pursuant to Section XXII (Modification). If such change is not material, no modification of this Consent Decree shall be required.

162. Disagreement. If Plaintiffs do not accept Defendants' claim of Force Majeure, or if the Plaintiffs and Defendants cannot agree on the length of the delay actually caused by the Force Majeure Event, or the extent of relief required to address the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XV (Dispute Resolution) of this Consent Decree.

163. Burden of Proof. In any dispute regarding Force Majeure, Defendants shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Defendants shall also bear the burden of proving that Defendants gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a

Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.

164. Events Excluded. Unanticipated or increased costs or expenses associated with the performance of Defendants' obligations under this Consent Decree shall not constitute a Force Majeure Event.

165. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Defendants' response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; unanticipated coal supply or pollution control reagent delivery interruptions; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs Defendants to operate an AEP Eastern System Unit in response to a local or system-wide (state-wide or regional) emergency (which could include unanticipated required operation to avoid loss of load or unserved load).

Depending upon the circumstances and Defendants' response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Defendants and Defendants have taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

166. As part of the resolution of any matter submitted to this Court under Section XV (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the Plaintiffs and Defendants by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the Plaintiffs or approved by the Court. Defendants shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule (provided that Defendants shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

XV. DISPUTE RESOLUTION

167. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Parties.

168. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Parties advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Parties receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.

169. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend

this period. During the informal negotiations period, the disputing Parties may also submit their dispute to a mutually agreed upon alternative dispute resolution (ADR) forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).

170. If the disputing Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide Defendants with a written summary of their position regarding the dispute. The written position provided by Plaintiffs shall be considered binding unless, within forty-five (45) days thereafter, Defendants seek judicial resolution of the dispute by filing a petition with this Court. The Plaintiffs may respond to the petition within forty-five (45) days of filing. In their initial filings with the Court under this Paragraph, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

171. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.

172. This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.

173. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Defendants shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance

with the extended or modified schedule, provided that Defendants shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

174. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court under Paragraph 170, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVI. PERMITS

175. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Defendants to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, Defendants shall make such application in a timely manner. Defendants shall provide Notice to Plaintiffs under Section XVIII (Notices), for each Unit that Defendants submit an application for any permit described in this Paragraph 175.

176. Notwithstanding the previous Paragraph, nothing in this Consent Decree shall be construed to require Defendants to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of, any AEP Eastern System Unit that would give rise to claims resolved by Paragraph 132 and 133, subject to Paragraphs 134 through 138, or Paragraphs 139 and 141 of this Consent Decree.

177. When permits are required as described in Paragraph 175, Defendants shall complete and submit applications for such permits to the appropriate authorities to allow time for all legally required processing and review of the permit request, including requests for additional

information by the permitting authorities. Any failure by Defendants to submit a timely permit application for any Unit in the AEP Eastern System shall bar any use by Defendants of Section XIV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

178. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term or limit has or will become part of a Title V permit, subject to the terms of Section XXVI (Conditional Termination of Enforcement Under Decree) of this Consent Decree.

179. Within three (3) years from the Date of Entry of this Consent Decree, and in accordance with federal and/or state requirements for modifying or renewing a Title V permit, Defendants shall amend any applicable Title V permit application, or apply for amendments to their Title V permits, to include a schedule for any Unit-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates or other limitations. For Units subject to a requirement to Retire, Retrofit, or Re-power, Defendants shall apply to modify, renew, or obtain any applicable Title V permit to include a schedule for any Unit-specific performance, operation, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates or other limitations, within (12) twelve months of making such election to Retire, Retrofit, or Re-power.

180. Within one (1) year from commencement of operation of each pollution control device to be installed, upgraded, and/or operated under this Consent Decree, Defendants shall apply to include the requirements and limitations enumerated in this Consent Decree into federally-enforceable non-Title V permits and/or site-specific amendments to the applicable state implementation plans to reflect all new requirements applicable to each Unit in the AEP Eastern System, the Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River, and the Plant-Wide Annual Tonnage Limitation for SO₂ at Kammer.

181. Defendants shall provide the United States with a copy of each application for a federally-enforceable non-Title V permit or amendment to a state implementation plan, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment period.

182. Prior to termination of this Consent Decree, Defendants shall obtain enforceable provisions in their Title V permits for the AEP Eastern System that incorporate (a) any Unit-specific requirements and limitations of this Consent Decree, such as performance, operational, maintenance, and control technology requirements, (b) the Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River and the Plant-Wide Annual Tonnage Limitation for SO₂ at Kammer, and (c) the Eastern System-Wide Annual Tonnage Limitations for SO₂ and NO_x. If Defendants do not obtain enforceable provisions for the Eastern System-Wide Annual Tonnage Limitations for SO₂ and NO_x in such Title V permits, then the requirements in Paragraphs 86 and 67 shall remain enforceable under this Consent Decree and shall not be subject to termination.

183. If Defendants sell or transfer to an entity unrelated to Defendants (“Third-Party Purchaser”) part or all of Defendants’ Ownership Interest in a Unit in the AEP Eastern System,

Defendants shall comply with the requirements of Section XIX (Sales or Transfers of Operational or Ownership Interests) with regard to that Unit prior to any such sale or transfer unless, following any such sale or transfer, Defendants remain the holder of the Title V permit for such facility.

XVII. INFORMATION COLLECTION AND RETENTION

184. Any authorized representative of the United States, including attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the AEP Eastern System at any reasonable time for the purpose of:

- a. monitoring the progress of activities required under this Consent Decree;
- b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtaining samples and, upon request, splits of any samples taken by Defendants or their representatives, contractors, or consultants; and
- d. assessing Defendants' compliance with this Consent Decree.

185. Defendants shall retain, and instruct their contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in their or their contractors' or agents' possession or control (with the exception of their contractors' copies of field drawings and specifications), and that directly relate to Defendants' performance of their obligations under this Consent Decree until six (6) years following completion of performance of such obligations. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.

186. All information and documents submitted by Defendants pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of

documents unless (a) the information and documents are subject to legal privileges or protection or (b) Defendants claim and substantiate in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.

187. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections at Defendants' facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations, or permits.

XVIII. NOTICES

188. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044-7611
DJ# 90-5-2-1-06893

and

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [Mail Code 2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

and

Air Enforcement & Compliance Assurance Branch
U.S. EPA Region V
77 W. Jackson St.
Mail Code AE17J
Chicago, IL 60604

and

Air Protection Division Director
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103

As to the State of Connecticut:

Office of the Attorney General
Environmental Department
P.O. Box 120
Hartford, Connecticut
06141-0120

As to the State of Maryland:

Frank Courtright
Program Manager
Air Quality Compliance Program
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, Maryland 21230
fcourtright@mde.state.md.us

As to the Commonwealth of Massachusetts:

Frederick D. Augenstern, Assistant Attorney General
Office of the Attorney General
1 Ashburton Place, 18th floor
Boston, Massachusetts 02108
fred.augenstern@state.ma.us

and

Douglas Shallcross, Esquire
Department of Environmental Protection
Office of General Counsel
1 Winter Street
Boston, Massachusetts 02108
Douglas.Shallcross@state.ma.us

As to the State of New Hampshire:

Director, Air Resources Division
New Hampshire Department of Environmental Services
29 Hazen Drive
Concord, New Hampshire 03302-0095

As to the State of New Jersey:

Kevin P. Auerbacher
Section Chief
Environmental Enforcement Section
R.J. Hughes Justice Complex
25 Market Street
P.O. Box 093
Trenton, New Jersey 08625-0093

As to the State of New York:

Robert Rosenthal
Assistant Attorney General
New York State Attorney General's Office
The Capitol
Albany, New York 12224

As to the State of Rhode Island:

Tricia K. Jedele
Special Assistant Attorney General
150 South Main Street
Providence, RI 02903
(401) 274-4400, Ext. 2400
tjedele@riag.ri.gov

As to the State of Vermont:

Environmental Division
Office of the Attorney General
109 State Street
Montpelier, Vermont 05609-1001

and

Director
Air Pollution Control Division
Department of Environmental Conservation
Agency of Natural Resources
Building 3 South
103 South Main Street
Waterbury, Vermont 05671-0402

As to the Citizen Plaintiffs:

Nancy S. Marks
Natural Resources Defense Council, Inc.
40 West 20th Street
New York, New York 10011
(212) 727-4414
nmarks@nrdc.org

and

Albert F. Ettinger
Environmental Law and Policy Center
35 East Wacker Dr. Suite 1300
Chicago, Illinois 60601-2110
(312) 673-6500
aettinger@elpc.org

As to Defendants:

Vice President, Environmental Services
American Electric Power Service Corporation
1 Riverside Plaza
Columbus, OH 43215
jmmcmanus@aep.com

and

General Counsel
American Electric Power
1 Riverside Plaza
Columbus, OH 43215
jbkeane@aep.com

189. All notifications, communications, or submissions made pursuant to this Section shall be sent as follows: (a) by overnight mail or overnight delivery service to the United States;

and (b) by electronic mail to all Plaintiffs, if practicable, but if not practicable, then by overnight mail or overnight delivery service to the States and Citizen Plaintiffs. All notifications, communications, and transmissions sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.

190. Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

XIX. SALES OR TRANSFERS OF OPERATIONAL OR OWNERSHIP INTERESTS

191. If Defendants propose to sell or transfer an Operational or Ownership Interest to an entity unrelated to Defendants (“Third Party”), they shall advise the Third Party in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XVIII (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.

192. No sale or transfer of an Operational or Ownership Interest shall take place before the Third Party and Plaintiffs have executed, and the Court has approved, a modification pursuant to Section XXII (Modification) of this Consent Decree making the Third Party a party to this Consent Decree and jointly and severally liable with Defendants for all the requirements of this Decree that may be applicable to the transferred or purchased Interests.

193. This Consent Decree shall not be construed to impede the transfer of any Interests between Defendants and any Third Party so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation – as between Defendants and any Third Party – of the burdens of compliance with this Decree,

provided that both Defendants and such Third Party shall remain jointly and severally liable for the obligations of the Consent Decree applicable to the transferred or purchased Interests.

194. If the Plaintiffs agree, the Plaintiffs, Defendants, and the Third Party that has become a party to this Consent Decree pursuant to Paragraph 192, may execute a modification that relieves Defendants of liability under this Consent Decree for, and makes the Third Party liable for, all obligations and liabilities applicable to the purchased or transferred Interests. Notwithstanding the foregoing, however, Defendants may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Interests, including the obligations set forth in Section VIII (Environmental Mitigation Projects), Paragraphs 86 and 67, and Section IX (Civil Penalty). Defendants may propose and the Plaintiffs may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Interests, to the extent such obligations may be adequately separated in an enforceable manner.

195. Defendants may propose and Plaintiffs may agree to restrict the scope of joint and several liability of any purchaser or transferee for any AEP Eastern System obligations to the extent such obligations may be adequately separated in an enforceable manner using the methods provided by or approved under Section XVI (Permits).

196. Paragraphs 191-195 of this Consent Decree do not apply if an Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as Defendants: (a) remain the operator (as that term is used and interpreted under the Clean Air Act) of the subject AEP Eastern System Unit(s); (b) remain

subject to and liable for all obligations and liabilities of this Consent Decree; and (c) supply Plaintiffs with the following certification within thirty (30) days of the sale or transfer:

“Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of American Electric Power (“AEP”), hereby jointly certify under Title 18 U.S.C. Section 1001, on our own behalf and on behalf of AEP, that any change in AEP’s Ownership Interest in any AEP Eastern System Unit that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between AEP and [insert applicable entity]: a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; b) does not impair AEP’s ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in *United States, et al. v. American Electric Power Service Corp., et al.*, Civil Action No. C2-99-1250 (“AEP I”) and *United States, et al. v. American Electric Power Service Corp., et al.*, Civil Action Nos. C2-04-1098 and C2-05-360 (“AEP II”); c) does not affect AEP’s operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with AEP’s performance of its obligations under the Consent Decree; and d) in no way affects the status of AEP’s obligations or liabilities under that Consent Decree.”

XX. EFFECTIVE DATE

197. The effective date of this Consent Decree shall be the Date of Entry.

XXI. RETENTION OF JURISDICTION

198. The Court shall retain jurisdiction of this case after the Date of Entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXII. MODIFICATION

199. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Plaintiffs and Defendants. Where the modification constitutes a material change to any term of this Decree, it shall be effective only upon approval by the Court.

XXIII. GENERAL PROVISIONS

200. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The limitations and requirements set forth herein do not relieve Defendants from any obligation to comply with other state and federal requirements under the Clean Air Act at any Units covered by this Consent Decree, including the Defendants' obligation to satisfy any state modeling requirements set forth in a state implementation plan.

201. This Consent Decree does not apply to any claim(s) of alleged criminal liability.

202. In any subsequent administrative or judicial action initiated by any of the Plaintiffs for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, Defendants shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by any of the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph affects the validity of Paragraphs Paragraph 132 and 133, subject to Paragraphs 134 through 138, or Paragraphs 139 and 141.

203. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Defendants of their obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Section X (Resolution of Civil

Claims Against Defendants), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.

204. At any time prior to termination of this Consent Decree, Defendants may request approval from Plaintiffs to implement other control technology for SO₂ or NO_x than what is required by this Consent Decree. In seeking such approval, Defendants must demonstrate that such alternative control technology is capable of achieving pollution reductions equivalent to an FGD (for SO₂) or SCR (for NO_x) at the Units in the AEP Eastern System at which Defendants seek approval to implement such other control technology for SO₂ or NO_x. Approval of such a request is solely at the discretion of the Plaintiffs.

205. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act generated either by the reference methods specified herein or otherwise.

206. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.

207. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. Defendants shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual

Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. Defendants shall report data to the number of significant digits in which the standard or limit is expressed.

208. This Consent Decree does not limit, enlarge, or affect the rights of any Party to this Consent Decree as against any third parties.

209. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.

210. Except for Citizen Plaintiffs, each Party to this action shall bear its own costs and attorneys' fees. Defendants shall reimburse the Citizen Plaintiffs' attorneys' fees and costs, pursuant to 42 U.S.C. § 7604(d), and the agreement between counsel for Defendants and Citizen Plaintiffs within thirty (30) days of the Date of Entry of this Consent Decree.

XXIV. SIGNATORIES AND SERVICE

211. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.

212. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.

213. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXV. PUBLIC COMMENT

214. The Parties agree and acknowledge that final approval by the United States and the entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. The Defendants shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified the Defendants, in writing, that the United States no longer supports entry of the Consent Decree.

XXVI. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

215. Termination as to Completed Tasks. As soon as Defendants complete a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, Defendants may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.

216. Conditional Termination of Enforcement Through the Consent Decree. After Defendants:

- a. have successfully completed construction, and have maintained Continuous Operation, of all pollution controls as required by this Consent Decree;

- b. have obtained final Title V permits (i) as required by the terms of this Consent Decree; (ii) that cover all Units in this Consent Decree; and (iii) that include as enforceable permit terms all of the Unit performance and other requirements specified in this Consent Decree; and
- c. certify that the date is later than December 31, 2022;

then Defendants may so certify these facts to the Plaintiffs and this Court. If the Plaintiffs do not object in writing with specific reasons within forty-five (45) days of receipt of Defendants' certification, then, for any Consent Decree violations that occur after the filing of notice, the Plaintiffs shall pursue enforcement of the requirements contained in the Title V permit through the applicable Title V permit and not through this Consent Decree.

217. Resort to Enforcement under this Consent Decree. Notwithstanding Paragraph 216, if enforcement of a provision in this Consent Decree cannot be pursued by a Party under the applicable Title V permit, or if a Consent Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XXVII. FINAL JUDGMENT

218. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment among the Parties.

SO ORDERED, THIS _____ DAY OF _____, 2007.

HONORABLE EDMUND A. SARGUS, JR.
UNITED STATES DISTRICT COURT JUDGE

HONORABLE GREGORY L. FROST
UNITED STATES DISTRICT COURT JUDGE

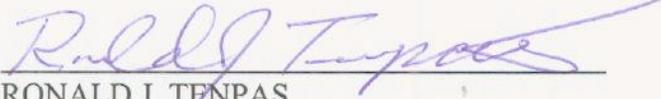
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United States et al.

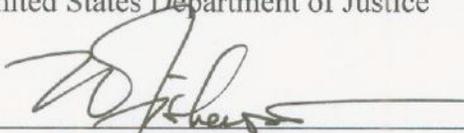
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American Electric Power Service Corp., et al.

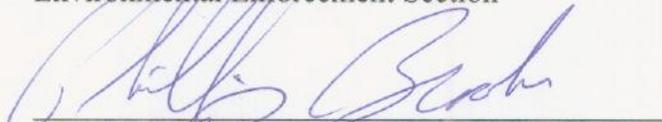
FOR THE UNITED STATES:



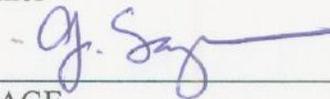
RONALD J. TENPAS
Acting Assistant Attorney General
Environmental and Natural Resources Division
United States Department of Justice



W. BENJAMIN FISHEROW
Deputy Chief
Environmental Enforcement Section



PHILIP A. BROOKS
Counsel to the Chief



JUSTIN A. SAVAGE
THOMAS A. MARIANI
Assistant Chief
JAMES A. LOFTON
Senior Counsel
MARC BORODIN
JENNIFER A. LUKAS-JACKSON
THOMAS A. BENSON
KATHERINE L. VANDERHOOK
DEBORAH BEHLES
MYLES E. FLINT, II
Trial Attorneys
LESLIE B. BELLAS
By Special Appointment as a Department of Justice
Attorney
Environmental Enforcement Section
Environmental and Natural Resources Division

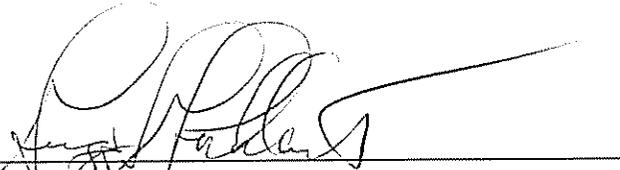
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FOR THE UNITED STATES OF AMERICA:



GREGORY G. LOCKHART
United States Attorney
Southern District of Ohio



MARK D'ALESSANDRO
Assistant United States Attorney
Southern District of Ohio
United States Department of Justice

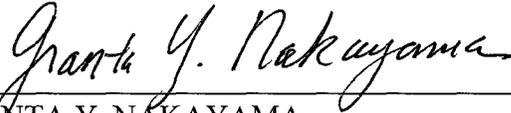
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United States et al.

v.

American Electric Power Service Corp., et al.

FOR THE UNITED STATES:



GRANTA Y. NAKAYAMA

Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency



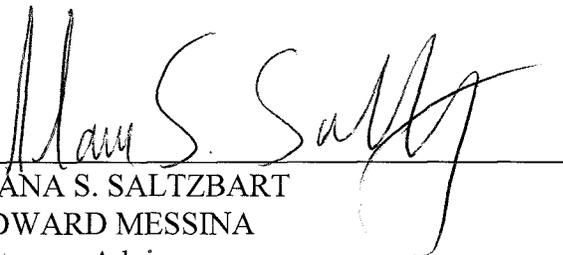
WALKER B. SMITH

Director, Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency



ADAM M. KUSHNER

Acting Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency



ILANA S. SALTZBART

EDWARD MESSINA

Attorney-Advisor

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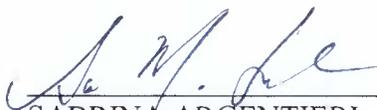
MARY A. GADE
Regional Administrator
Region 5
U.S. Environmental Protection Agency



ROBERT A. KAPLAN
Regional Counsel
Region 5
U.S. Environmental Protection Agency



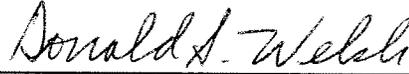
STEPHEN ROTHBLATT
Director
Air and Radiation Division
Region 5
U.S. Environmental Protection Agency



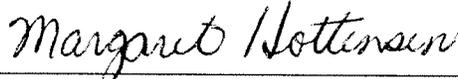
SABRINA ARGENTIERI
Associate Regional Counsel
Region 5
U.S. Environmental Protection Agency

Signature Page for Consent Decree in:

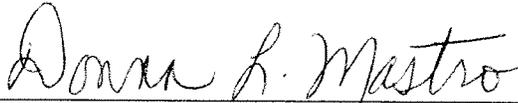
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v.
American Electric Power Service Corp., et al.



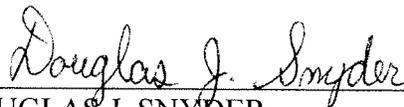
DONALD S. WELSH
Regional Administrator
U.S. EPA Region III



for
WILLIAM C. EARLY
Regional Counsel
U.S. EPA Region III



DONNA L. MASTRO
Senior Assistant Regional Counsel
U.S. EPA Region III



DOUGLAS J. SNYDER
Senior Assistant Regional Counsel
U.S. EPA Region III

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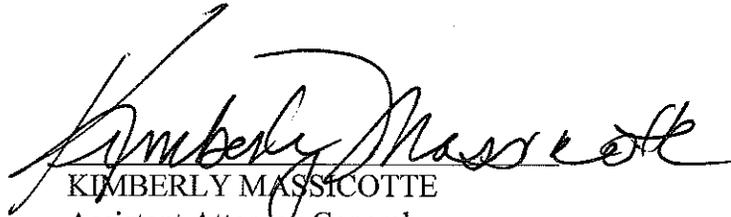
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American Electric Power Service Corp., et al.

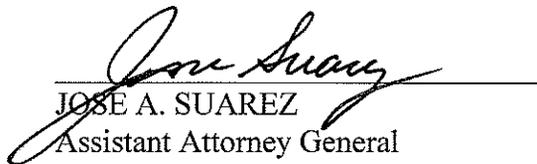
FOR THE STATE OF CONNECTICUT:



RICHARD BLUMENTHAL
Attorney General



KIMBERLY MASSICOTTE
Assistant Attorney General



JOSE A. SUAREZ
Assistant Attorney General

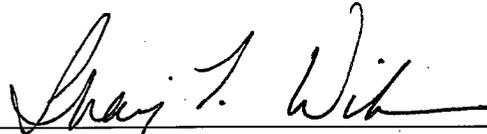
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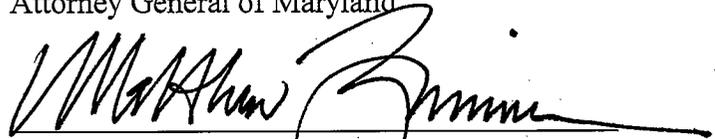
American Electric Power Service Corp., et al.

FOR THE STATE OF MARYLAND:



SHARI T. WILSON, Secretary
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, Maryland 21230

DOUGLAS F. GANSLER
Attorney General of Maryland



MATTHEW ZIMMERMAN
Assistant Attorney General
Office of the Attorney General
1800 Washington Blvd.
Baltimore, Maryland 21230
410-537-3452

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FOR THE COMMONWEALTH OF MASSACHUSETTS:

MARTHA COAKLEY
ATTORNEY GENERAL



FREDERICK D. AUGENSTERN
Assistant Attorney General
Environmental Protection Division
1 Ashburton Place, 18th Floor
Boston, Massachusetts 02108
(617) 727-2200 ext. 2427

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FOR THE STATE OF NEW HAMPSHIRE:



MAUREEN D. SMITH
Senior Assistant Attorney General
33 Capitol Street
Concord, New Hampshire 03301



K. ALLEN BROOKS
Assistant Attorney General
33 Capitol Street
Concord, New Hampshire 03301

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FOR THE STATE OF NEW JERSEY:

Very Truly Yours,

ANNE MILGRAM
ATTORNEY GENERAL OF NEW JERSEY

By:


Jon C. Martin
Deputy Attorney General

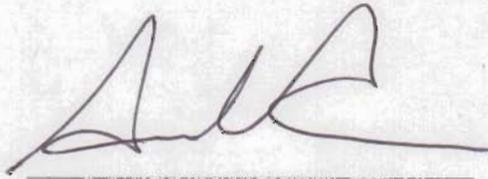
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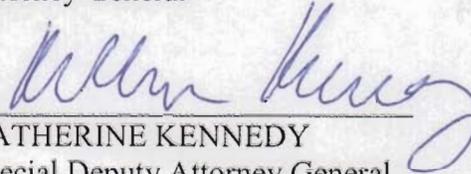
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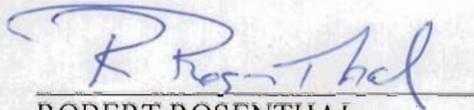
FOR THE STATE OF NEW YORK:



ANDREW M. CUOMO
Attorney General



KATHERINE KENNEDY
Special Deputy Attorney General
for Environmental Protection



ROBERT ROSENTHAL
MICHAEL J. MYERS
Assistant Attorneys General
Environmental Protection Bureau
The Capitol
Albany, New York 12224
(518) 402-2260
Of counsel

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FOR THE STATE OF RHODE ISLAND:


PATRICK C. LYNCH
Attorney General


TRICIA K. JEDELE
Special Assistant Attorney General
150 South Main Street
Providence, Rhode Island 02903
Of counsel

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FOR THE STATE OF VERMONT:

WILLIAM H. SORRELL
ATTORNEY GENERAL
STATE OF VERMONT



KEVIN O. LESKE
ERICK TITRUD
Assistant Attorneys General
Environmental Division
109 State Street
Montpelier, VT 05609-1001

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FOR CITIZEN PLAINTIFFS:



NANCY S. MARKS

Natural Resources Defense Council, Inc.

40 West 20th Street

New York, New York 10011

(212) 727-4414

For Citizen Plaintiffs Sierra Club and
Natural Resources Defense Council, Inc.

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FOR CITIZEN PLAINTIFFS:



ALBERT F. ETTINGER

Environmental Law & Policy Center
35 East Wacker Drive, Suite 1300
Chicago, Illinois 60601-2110

For Citizen Plaintiffs Ohio Citizen Action,
CitizensAction Coalition of Indiana,
Hoosier Environmental Council,
Ohio Valley Environmental Coalition,
West Virginia Environmental Council,
Clean Air Council,
Izaak Walton League of America,
United States Public Interest Research Group,
National Wildlife Federation,
Indiana Wildlife Federation
and League of Ohio Sportsmen

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FOR CITIZEN PLAINTIFFS:



STEPHEN P. SAMUELS, Ohio Bar #0007979
Schottenstein, Zox & Dunn Co., LPA
P.O. Box 165020
Columbus, Ohio 43216-5020
(614) 462-5021

Local Counsel for Sierra Club and
Natural Resources Defense Council, Inc. Ohio Citizen
Action, Citizens Action Coalition of Indiana, Hoosier
Environmental Council, Ohio Valley
Environmental Coalition, West Virginia
Environmental Council, Clean Air Council,
Izaak Walton League of America, United States
Public Interest Research Group, National Wildlife
Federation, Indiana Wildlife Federation, and League
of Ohio Sportsmen

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FOR DEFENDANTS AMERICAN ELECTRIC POWER SERVICE CORPORATION, ET AL.:



NICHOLAS K. AKINS

Executive Vice President – Generation

APPENDIX A
ENVIRONMENTAL MITIGATION PROJECTS

In compliance with and in addition to the requirements in Section VIII of this Consent Decree (Environmental Mitigation Projects), Defendants shall comply with the requirements of this Appendix to ensure that the benefits of the \$36 million in federally directed Environmental Mitigation Projects are achieved.

I. National Parks Mitigation

- A. Within 45 days from the Date of Entry, Defendants shall pay to the National Park Service the sum of \$2 million to be used in accordance with the Park System Resource Protection Act, 16 U.S.C. § 19jj, for the restoration of land, watersheds, vegetation, and forests using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. This may include reforestation or restoration of native species and acquisition of equivalent resources and support for collaborative initiatives with state and local agencies and other stakeholders to develop plans to assure resource protection over the long-term. Projects will focus on one or more of the following Class I areas alleged in the underlying action to have been injured by emissions from Defendants facilities: Shenandoah National Park, Mammoth Cave National Park, and Great Smoky Mountains National Park.
- B. Payment of the amount specified in the preceding paragraph shall be made to the Natural Resource Damage and Assessment Fund managed by the United States Department of the Interior. Instructions for transferring funds will be provided to the Defendants by the National Park Service. Notwithstanding Section I.A of this Appendix, payment of funds by Defendants is not due until ten (10) days after receipt of payment instructions.
- C. Upon payment of the required funds into the Natural Resource Damage and Assessment Fund, Defendants shall have no further responsibilities regarding the implementation of any project selected by the National Park Service in connection with this provision of the Consent Decree.

II. Overall Environmental Mitigation Project Schedule and Budget

- A. Within 120 days of the Date of Entry, as further described below, Defendants shall submit plans to EPA for review and approval for completing the remaining \$34 million in federally directed Environmental Mitigation Projects specified in this Appendix over a period of not more than five (5) years from the Date of Entry. EPA will consult with the Citizen Plaintiffs, through their counsel, prior to approving or commenting on any proposed plan. The Parties agree that Defendants are entitled to spread their payments for Environmental Mitigation Projects evenly over the five-year period commencing upon the Date of Entry. Defendants are not, however, precluded from accelerating payments to better effectuate a proposed mitigation plan, provided however, Defendants shall not be

entitled to any reduction in the nominal amount of the required payments by virtue of the early expenditures. EPA may, but is not required to, approve a proposed Project budget that results in a back-loading of some expenditures. EPA shall determine prior to approval that all Projects are consistent with federal law.

- B. Defendants may, at their election, consolidate the plans required by this Appendix into a single plan.
- C. In addition to the requirements set forth below, Defendants shall submit within 120 days of the Date of Entry, a summary-level budget and Project time-line that covers all of the Projects proposed.
- D. Beginning March 31, 2008, and continuing on March 31 of each year thereafter until completion of each Project (including any applicable periods of demonstration or testing), Defendants shall provide the United States and Citizen Plaintiffs with written reports detailing the progress of each Project, including Project Dollars.
- E. Within 60 days following the completion of each Project required under Appendix A, Defendants shall submit to the United States and Citizen Plaintiffs a report that documents the date that the Project was completed, the results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Defendants in implementing the Project.
- F. Upon approval of the plans required by this Appendix by EPA, Defendants shall complete the Environmental Mitigation Projects according to the approved plans. Nothing in this Consent Decree shall be interpreted to prohibit Defendants from completing Environmental Mitigation Projects before the deadlines specified in the schedule of an approved plan.

III. Acquisition and Restoration of Ecologically Significant Areas in Indiana, Kentucky, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia

- A. Within 120 days of the Date of Entry, and on each anniversary of the initial submission for the following four (4) years, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for acquisition and/or restoration of ecologically significant areas in Indiana, Kentucky, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia (“Land Acquisition and Restoration”). Defendants shall spend no less than a total of \$10 million in Project Dollars on Land Acquisition and Restoration over the five year period provided under this Appendix for completion of federally directed Environmental Mitigation Projects.

- B. Defendants' proposed plan shall:
1. Describe the proposed Land Acquisition and Restoration projects in sufficient detail to allow the reader to ascertain how each proposed action meets the requirements set out below. For purposes of this Appendix and Section VIII (Environmental Mitigation Projects) of this Consent Decree, land acquisition means purchase of interests in land, including fee ownership, easements, or other restrictions that run with the land that provide for perpetual protection of the acquired land. Restoration may include, by way of illustration, direct reforestation (particularly of tree species that may be affected by acidic deposition) and soil enhancement. Any restoration action must also incorporate the acquisition of an interest in the restored lands sufficient to ensure perpetual protection of the restored land. Any proposal for acquisition of land must identify fully all owners of the interests in the land. Every proposal for acquisition of land must identify the ultimate holder of the interests to be acquired and provide a basis for concluding that the proposed holder of title is appropriate for long-term protection of the ecological or environmental benefits sought to be achieved through the acquisition.
 2. Describe generally the ecological significance of the area to be acquired or restored. In particular, identify the environmental/ecological benefits expected as a result of the proposed action. In proposing areas for acquisition and restoration, Defendants shall focus on those areas that are in most need of conservation action or that promise the greatest conservation return on investment.
 3. Describe the expected cost of the Land Acquisition and Restoration, including the fair market value of any areas to be acquired.
 4. Identify any person or entity other than Defendants that will be involved in the land acquisition or restoration action. Defendants shall describe the third-party's role in the action and the basis for asserting that such entity is able and suited to perform the intended role. For purposes of this Section of the Appendix, third-parties shall only include non-profits; federal, state, and local agencies; or universities. Any proposed third-party must be legally authorized to perform the proposed action or to receive Project Dollars.
 5. Include a schedule for completing and funding each portion of the project.
- C. Performance - Upon approval of the plan by EPA, after consultation with the Citizen Plaintiffs, Defendants shall complete the Land Acquisition and Restoration project according to the approved plan and schedule.

IV. Nitrogen Impact Mitigation in the Chesapeake Bay

- A. Within 120 days of Date of Entry, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for the mitigation of adverse impacts on the Chesapeake Bay associated with nitrogen (“Chesapeake Bay Mitigation Project”). Defendants shall spend no less than a total of \$3 million in Project Dollars on the Chesapeake Bay Mitigation Project.
- B. Defendant’s proposed plan shall:
1. Describe proposed Project(s) that reduce nitrogen loading in the Chesapeake Bay or otherwise mitigate the adverse effects of nitrogen in the Chesapeake Bay. Projects that may be approved include, by way of illustration, creation of forested stream buffers on agricultural land or other land cover to establish a “buffer zone” to keep livestock out of the adjoining waterway and to filter runoff before it enters the waterway.
 2. Describe generally the expected environmental benefit of the proposed Chesapeake Bay Mitigation Project. The key criteria for selection of components of the Project are the magnitude of the expected ecological/environmental benefit(s) in relation to the cost and the relative permanence of the expected benefit(s). Expected loadings benefits should be quantified to the extent practicable.
 3. Describe the expected cost of each element of the Chesapeake Bay Mitigation Project, including the fair market value of any interests in land to be acquired.
 4. Identify any person or entity other than Defendants that will be involved in any aspect of the Chesapeake Bay Mitigation Project. Defendants shall describe the third-party’s role in the action and the basis for asserting that such entity is able and suited to perform the intended role. For purposes of this Section of the Appendix, third-parties shall only include non-profits; federal, state, and local agencies; or universities. Any proposed third-party must be legally authorized to perform the proposed action or to receive Project Dollars.
 5. Include a schedule for completing and funding each portion of the Project.
- C. Performance - Upon approval of the plan for Chesapeake Bay Mitigation by EPA, Defendants shall complete the Project according to the approved plan and schedule.

V. Mobile Source Emission Reduction Projects

- A. Within 120 days of the Date of Entry, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for the completion of Projects to reduce emissions from Defendants' fleet of barge tugboats on the Ohio River, diesel trains at or near power plants, Defendants' fleet of motor vehicles in certain eastern states, and/or truck stops in certain eastern states ("Mobile Source Projects"). Defendants shall spend no less than a total of \$21 million in Project Dollars on one or more of the three Mobile Source Projects specified in this Section, in accordance with the plans for such Projects approved by EPA, after consultation with the Citizen Plaintiffs. The key criteria for selection of components of the Mobile Source Projects are the magnitude of the expected environmental benefit(s) in relation to the cost.
- B. Diesel Tug/Train Project
1. Defendants are among the leading barge operators in the country, with operations on the Ohio River, the Mississippi River, and the Gulf Coast. Barges are propelled by tugboats, which generally use a type of marine diesel fuel known as No. 2 distillate fuel oil. Tugboats that switch to ultra-low sulfur diesel fuel ("ULSD") reduce emissions of NO_x, PM, volatile organic compounds ("VOCs"), and other air pollutants. All marine diesel fuel must be ULSD by June 1, 2012, pursuant to EPA's Nonroad Diesel Rule (see "Control of Emissions of Air Pollution from Nonroad Diesel Engines and Fuels; Final Rule," 69 Fed. Reg. 38,958 (June 29, 2004)). Defendants also receive coal by diesel trains.
 2. As part of the plan for Mobile Source Projects, Defendants may elect to achieve accelerated emission reductions from their tugboat fleet on the Ohio River ("Ohio River Tug Fleet") and/or their diesel powered trains used at or near their power plants, as one of the three possible mobile source Projects under this Consent Decree ("Diesel Tug/Train Project").
 3. The Diesel Tug/Train Project shall require one or more of the following:
 - a. The accelerated retrofitting or re-powering of Tugs with engines that require the use of ULSD. Selection of this Project is expressly conditioned upon identification of satisfactory technology and an agreement between EPA and Defendants on how to credit Project Dollars towards this project.
 - b. The retrofitting or repowering of the marine engines in the Ohio River Tug Fleet with diesel oxidation catalysts ("DOCs"), diesel particulate filters ("DPFs"), or other equivalent advanced technologies that reduce emissions of PM and VOCs from marine engines in tugboats (collectively "DOC/DPFs"). Defendants shall only install DOCs/DPFs that have received applicable approvals or

verifications, if any, from the relevant regulatory agencies for reducing emissions from tugboat engines. Defendants must maintain any DOCs/DPFs installed as part of the Tug Project for the useful life of the equipment (as defined in the proposed Plan), even after the completion of the Tug Project. Project Dollars may be spent on DOCs/DPFs within 5 years of the Date of Entry, in accordance with the approved schedule for the mitigation projects in this Appendix.

- c. The accelerated use of ULSD for the Ohio River Tug Fleet, from the Date of Entry through January 1, 2012. Notwithstanding any other provision of this Consent Decree, including this Appendix, Defendants shall only receive credit for the incremental cost of ULSD as compared to the cost of the fuel Defendants would otherwise utilize.
 - d. Emission reduction measures for diesel powered trains. Such measures may include retro-fitting with, or conversion to, Multiple Diesel Engine GenSets that are EPA Tier III Off-Road certified; Diesel Electric Hybrid; Anti-idling controls/strategies and Auto Shut-Off capabilities. Selection of this Project is expressly conditioned upon identification of satisfactory technology and an agreement between EPA and Defendants on how to credit Project Dollars towards this project.
4. The proposed plan for the Diesel Tug/Train Project shall:
- a. Describe the expected cost of the project, including the costs for any equipment, material, labor costs, and the proposed method for accounting for the cost of each element of the Diesel Tug/Train Project, including the incremental cost of ULSD.
 - b. Describe generally the expected environmental benefit of the project, including any expected fuel efficiency improvements and quantify emission reductions expected.
 - c. Include a schedule for completing each portion of the Diesel Tug/Train Project.
5. Performance - Upon approval of the Diesel Tug/Train Project plan by EPA, Defendants shall complete the project according to the approved plan and schedule.

C. Hybrid Vehicle Fleet Project

1. AEP has a fleet of approximately 11,000 motor vehicles in the eleven states where it operates, including vehicles in Indiana, Ohio, Michigan, Virginia, West Virginia, and Kentucky. These motor vehicles are generally powered by conventional diesel or gasoline engines and include vehicles such as diesel “bucket” trucks. The use of hybrid engine technologies in Defendants’ motor vehicles, such as diesel-electric engines, will improve fuel efficiency and reduce emissions of NO_x, PM, VOCs, and other air pollutants.
2. As part of the plan for Mobile Source Projects, Defendants may elect to spend Project Dollars on the replacement of conventional motor vehicles in their fleet with newly manufactured Hybrid Vehicles (“Hybrid Vehicle Fleet Project”).
3. The proposed plan for the Hybrid Vehicle Fleet Project shall:
 - a. Propose the replacement of conventional gasoline or diesel powered motor vehicles (such as bucket trucks) with Hybrid Vehicles. For purposes of this subsection of this Appendix, “Hybrid Vehicle” means a vehicle that can generate and utilize electric power to reduce the vehicle’s consumption of fossil fuel. Any Hybrid Vehicle proposed for inclusion in the Hybrid Fleet Project shall meet all applicable engine standards, certifications, and/or verifications.
 - b. Provide for Hybrid Vehicles replacement in that portion of Defendants’ fleet in Indiana, Ohio, Michigan, West Virginia, Virginia, and/or Kentucky. Notwithstanding any other provision of this Consent Decree, including this Appendix, Defendants shall only receive credit toward Project Dollars for the incremental cost of Hybrid Vehicles as compared to the cost of a newly manufactured, similar motor vehicle.
 - c. Prioritize the replacement of diesel-powered vehicles in Defendants’ fleet.
 - d. Provide a method to account for the costs of the Hybrid Vehicles, including the incremental costs of such vehicles as compared to conventional gasoline or diesel motor vehicles.
 - e. Certify that Defendants will use the Hybrid Vehicles for their useful life (as defined in the proposed plan).
 - f. Include a schedule for completing each portion of the Project.

- f. Describe generally the expected environmental benefits of the Project and quantify emission reductions expected.
4. Performance - Upon approval of the plan for the Truck Stop Electrification Project by EPA, after consultation with the Citizen Plaintiffs, Defendants shall complete the Project according to the approved plan.

APPENDIX B

REPORTING REQUIREMENTS

I. Annual Reporting Requirements

In accordance with the dates specified below, for periods on and after the Date of Entry, Defendants shall submit annual reports to the United States, the States, and the Citizen Plaintiffs, electronically and in hard copy, as required by Paragraph 143 and certified as required by Paragraph 146. In such annual reports, Defendants shall include the following information:

A. Eastern System-Wide Annual Tonnage Limitations for SO₂ and NO_x

Beginning on March 31, 2010, for the Eastern System-Wide Annual Tonnage Limitations for NO_x, and March 31, 2011, for the Eastern System-Wide Annual Tonnage Limitations for SO₂, and annually thereafter, Defendants shall report the following information: (a) the total actual annual tons of the pollutant emitted from each Unit (or for Units vented to a common stack, from each combined stack) within the AEP Eastern System, as defined in Paragraph 7, during the prior calendar year; (b) the total actual annual tons of the pollutant emitted from the AEP Eastern System during the prior calendar year; (c) the difference, if any, between the applicable Eastern System-Wide Annual Tonnage Limitation for the pollutant in that calendar year and the amount reported in subparagraph (b); and (d) the annual average emission rate, expressed as a lb/mmBTU for NO_x, for each Unit within the AEP Eastern System and for the entire AEP Eastern System during the prior calendar year. Data reported pursuant to this subsection shall be based upon the CEMS data submitted to the Clean Air Markets Division.

B. Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the actual tons of SO₂ emitted from all Units at the Clinch River plant on an annual rolling average basis as defined in Paragraphs 47 and 88 for the prior calendar year; and (b) the applicable Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at the Clinch River plant for the prior calendar year. For calendar years other than 2010 and 2015, Defendants shall also report the 12-month rolling average emissions for each month.

C. Plant-Wide Tonnage Limitation for SO₂ at Kammer

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the actual tons of SO₂ emitted from all Units at the Kammer plant as specified in Paragraph 48 for the prior calendar year; and (b) the Plant-Wide Tonnage Limitation for SO₂ at the Kammer plant for that calendar year.

D. Reporting Requirements for Excess NO_x Allowances

1. Reporting Requirements for Unrestricted Excess NO_x Allowances

Beginning on March 31, 2010, and continuing annually through March 31, 2016, Defendants shall report the number of Unrestricted Excess NO_x Allowances available each year between 2009 through 2015, and how or whether such allowances were used so that Defendants account for each Unrestricted Excess NO_x Allowance for each year during 2009 through 2015. No later than March 31, 2016, Defendants shall report: (a) the cumulative number of unused Unrestricted Excess NO_x Allowances subject to surrender pursuant to Paragraph 75 and calculated pursuant to Paragraph 74, and (b) the total number of unused Unrestricted Excess NO_x Allowances that they surrendered.

2. Reporting Requirements for Restricted Excess NO_x Allowances

a. Beginning on March 31, 2010, and continuing annually through March 31, 2016, Defendants shall report: (a) the number of Restricted Excess NO_x Allowances available each year between 2009 through 2015; (b) the actual emissions from any New and Newly Permitted Unit during each year; (c) the actual NO_x emissions from the five natural gas plants listed in Paragraph 76 during each year; (d) the amount, if any, of Restricted Excess NO_x Allowances that are not subject to surrender each year because of Defendants' investment in renewable energy as defined in Paragraph 77 and the data supporting Defendants' calculation; and (e) the difference between the cumulative total of Restricted Excess NO_x Allowances available from each year and any prior year and the actual emissions reported under (b) and (c), above, for that year and any Restricted Excess NO_x Allowances not subject to surrender reported under (d), above. No later than March 31, 2016, Defendants shall report: (a) the cumulative number of unused Restricted Excess NO_x Allowances subject to surrender calculated pursuant to Paragraphs 76 and 77, and (b) the total number of unused Restricted Excess NO_x Allowances that they surrendered.

b. No later than March 31, 2017, and continuing annually thereafter, Defendants shall report: (a) the number of Restricted Excess NO_x Allowances available in the prior year; (b) the actual emissions from any New and Newly Permitted Unit during such year; (c) the actual emissions from the five natural gas plants listed in Paragraph 76 during such year; (d) the amount, if any, of Restricted Excess NO_x Allowances that are not subject to surrender for such year because of Defendants' investment in renewable energy as defined in Paragraph 77 and the data supporting Defendants' calculation; (e) the number of Restricted Excess NO_x Allowances subject to surrender for such year calculated pursuant to Paragraphs 76 and 77; and (f) the total number of unused Restricted Excess NO_x Allowances that they surrendered for such year.

E. Reporting Requirements for Excess SO₂ Allowances

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the number of Excess SO₂ Allowances subject to surrender calculated pursuant to Paragraph 93, and (b) the total number of Excess SO₂ Allowances that they surrendered.

F. Continuous Operation of Pollution Controls required by Paragraphs 68, 69, 87, and 102

On March 31 of the year following Defendants' obligation pursuant to this Consent Decree to commence Continuous Operation of an SCR, FGD, ESP, or Additional NO_x Pollution Controls, Defendants shall report the date that they commenced Continuous Operation of each such pollution control as required by this Consent Decree. Beginning on March 31, 2008, and continuing annually thereafter, Defendants shall report, for any SCR, FGD, ESP, or Additional NO_x Pollution Controls required to Continuously Operate during that year, the duration of any period during which that pollution control did not Continuously Operate, including the specific dates and times that such pollution control did not operate, the reason why Defendants did not Continuously Operate such pollution control, and the measures taken to reduce emissions of the pollutant controlled by such pollution control.

G. Installation of SO₂ and NO_x Pollution Controls

Beginning on March 31, 2008, and continuing annually thereafter, Defendants shall report on the progress of construction of NO_x and SO₂ pollution controls required by this Consent Decree including: (1) if construction is not underway, any available information concerning the construction schedule, including the dates of any major contracts executed during the prior calendar year, and any major components delivered during the prior calendar year; (2) if construction is underway, the estimated percent of installation as of the end of the prior calendar year, the current estimated construction completion date, and a brief description of completion of significant milestones during the prior calendar year, including a narrative description of the current construction status (e.g. foundations completed, absorber installation proceeding all material on-site, new stack erection completed, etc.); and (3) once construction is complete, the dates the equipment was placed in service and any acceptance testing was performed during the prior calendar year.

H. Installation and Operation of PM CEMS

Beginning on March 31, 2013, for Cardinal Units 1 and 2 and a third Unit identified pursuant to Paragraph 110, and continuing annually thereafter for all periods of operation of PM CEMS as required by this Consent Decree, Defendants shall report the data recorded by the PM CEMS, expressed in lb/mmBTU on a 3-hour rolling average basis in electronic format for the prior calendar year, in accordance with Paragraph 107.

I. Other SO₂ Measures

Commencing in the first annual report Defendants submit pursuant to Paragraph 143, and continuing annually thereafter, Defendants shall submit all data necessary to determine Defendants' compliance with the annual average coal content specified in the table in Paragraph 90.

J. 1-Hour Average NO_x Emission Rate and 30-Day Rolling Average Emission Rates for SO₂ and NO_x

1. Beginning on March 31 of the year following Defendants' obligation pursuant to this Consent Decree to first comply with an applicable 1-Hour Average NO_x Emission Rate and/or 30-Day Rolling Average Emission Rate for SO₂ and NO_x, and continuing annually thereafter, Defendants shall report all 1-Hour Average Emission Rate results and/or 30-Day Rolling Average Emission Rate results to determine compliance with such emission rate, as defined in Paragraph 4 or 5, as appropriate. Defendants shall also report: (a) the date and time that the Unit initially combusts any fuel after shutdown; (b) the date and time after startup that the Unit is synchronized with a utility electric distribution system; (c) the date and time that the fire is extinguished in a Unit; and (d) for the fifth and subsequent Cold Start Up Period that occurs within any 30-Day period, the earlier of the date and time that is either (i) eight hours after the unit is synchronized with a utility electric distribution system, or (ii) the flue gas has reached the SCR operational temperature range specified by the catalyst manufacturer.

2. Within the first report that identifies a 1-Hour Average NO_x Emission Rate or 30-Day Rolling Average Emission Rate for SO₂ or NO_x, Defendants shall include at least five (5) example calculations (including hourly CEMS data in electronic format for the calculation) used to determine the 1-Hour Average NO_x Emission Rate and the 30-Day Rolling Average Emission Rate for SO₂ or NO_x for five (5) randomly selected days. If at any time Defendants change the methodology used in determining the 1-Hour Average NO_x Emission Rate or the 30-Day Rolling Average Emission Rate for SO₂ or NO_x, Defendants shall explain the change and the reason for using the new methodology.

K. 30-Day Rolling Average Removal Efficiency for SO₂

1. Beginning on March 31 of the year following Defendants' obligation pursuant to this Consent Decree to first comply with a 30-Day Rolling Average Removal Efficiency, and continuing annually thereafter, Defendants shall report all 30-Day Rolling Average Removal Efficiency results to determine compliance with such removal efficiency as defined in Paragraph 6 or, for Conesville Units 5 and 6, as specified in Appendix C.

2. Within the first report that identifies a 30-Day Rolling Average Removal Efficiency for SO₂, Defendants shall include at least five (5) example calculations (including hourly CEMS data in electronic format for the calculation) used to determine the 30-Day Rolling Average Removal Efficiency for five (5) randomly selected days. If

at any time Defendants change the methodology used in determining the 30-Day Rolling Average Removal Efficiency, Defendants shall explain the change and the reason for using the new methodology.

L. PM Emission Rates

Beginning on March 31, 2010, for Cardinal Units 1 and 2, and beginning on March 31, 2013 for Muskingum River Unit 5, and continuing annually thereafter, Defendants shall report the PM Emission Rate as defined in Paragraph 51, for Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5. For all such Units, Defendants shall attach a copy of the executive summary and results of any stack test performed during the calendar year covered by the annual report.

M. Environmental Mitigation Projects

1. Mitigation Projects to be Conducted by the States

Defendants shall report the disbursement of funds as required in Paragraph 127 of the Consent Decree in the next annual progress report that Defendants submit pursuant to Paragraph 143 following such disbursement of funds.

2. Appendix A Projects

Beginning March 31, 2008, and continuing on March 31 of each year thereafter until completion of each Project (including any applicable periods of demonstration or testing), Defendants shall provide the United States and Citizen Plaintiffs with written reports detailing the progress of each Project, including Project Dollars.

N. Other Unit becoming an Improved Unit

If Defendants decide to make an Other Unit an Improved Unit, Defendants shall so state in the next annual progress report they submit pursuant to Paragraph 143 after making such decision, and comply with the reporting requirements specified in Section I.G of this Appendix and any other reporting or notice requirements in accordance with the Consent Decree.

II. Deviation Reports

Beginning March 31, 2008, and continuing annually thereafter, Defendants shall report a summary of all deviations from the requirements of the Consent Decree that occurred during the prior calendar year, identifying the date and time that the deviation occurred, the date and time the deviation was corrected, the cause and any corrective actions taken for each deviation, if necessary, and the date that the deviation was initially reported under Paragraph 145. In addition to any express requirements in Section I, above, or in the Consent Decree, such deviations required to be reported include, but are not limited to, the following requirements: the 1-Hour Average NO_x Emission Rate, the

30-Day Rolling Average Emission Rates for SO₂ and NO_x, the 30-Day Rolling Average Removal Efficiency for SO₂, and the PM Emission Rate.

III. Submissions Pending Review

In each annual report Defendants submit pursuant to Paragraph 143, Defendants shall include a list of all plans or submissions made pursuant to this Consent Decree during the calendar year covered by the annual report, the date(s) such plans or submissions were submitted to one or more Plaintiffs for review and/or approval, and shall identify which, if any, are still pending review and approval by Plaintiffs upon the date of submission of the annual report.

IV. Other Information Necessary To Determine Compliance

To the extent that information not expressly identified above is necessary to determine Defendants' compliance with the requirements of this Consent Decree during a reporting period, and has not otherwise been submitted in accordance with the provisions of the Consent Decree, Defendants shall provide such information as part of the annual report required pursuant to Section XI of the Consent Decree.

APPENDIX C

MONITORING STRATEGY AND CALCULATION OF THE 30-DAY ROLLING AVERAGE REMOVAL EFFICIENCY FOR CONESVILLE UNITS 5 AND 6

I. Monitoring Strategy

1. The SO₂ monitoring system for Conesville Units 5 & 6 will consist of two separate FGD inlet monitors in each of the two FGD inlet ducts for each Unit, and one FGD outlet monitor in the combined flow from the outlets of the FGD modules for each Unit, prior to the common stack.
2. Due to space constraints and potential interferences, monitors are currently located in the inlet duct for one FGD module on each Unit and at the combined outlet from both FGD modules for each Unit prior to entering the stack using best engineering judgment.
3. On or before December 31, 2008, Defendants shall submit a monitoring plan to EPA for approval that will propose where to site and install an additional inlet monitor in each of the unmonitored FGD inlet ducts for each Unit, and include a requirement that Defendants submit a complete certification application for the Conesville Units 5 & 6 monitoring system to EPA and the state permitting authority.
4. The Monitoring Plan will incorporate the applicable procedures and quality assurance testing found in 40 C.F.R. Part 75, subject to the following:
 - a. The PS-2 siting criteria will not be applied to these monitoring systems; however, the majority of the procedures in Section 8.1.3.2 of PS-2 will be followed. Sampling of at least nine (9) sampling points selected in accordance with PS-1 will be performed prior to the initial RATA. If the resultant SO₂ emission rates for any single sampling point calculated in accordance with Equation 19.7 are all within 10% or 0.02 lb/mmBtu of the mean of all nine (9) sampling points, the alternative traverse point locations (0.4, 1.2, and 2.0 meters from the duct wall) will be representative and may be used for all subsequent RATAs.
 - b. The required relative accuracy test audit will be performed in accordance with the procedures of 40 C.F.R. Part 75, except that the calculations will be performed on an SO₂ emission rate basis (i.e., lb/mmBtu).
 - c. The criteria for passing the relative accuracy test audit will be the same criteria that 40 C.F.R. Part 75 requires for relative accuracy or alternative performance specification as provided for NO_x emission rates.

- d. “Diluent capping” (i.e., 5% CO₂) will be applied to the SO₂ emission rate for any hours where the measured CO₂ concentration rounds to zero.
- e. Results of quality assurance testing, data gathered by the inlet and outlet monitoring systems, and the resultant 30-day Rolling Average Removal Efficiencies for these monitoring systems are not required to be reported in the quarterly reports submitted to EPA’s Clean Air Markets Division for purposes of 40 C.F.R. Part 75. Results will be maintained at the facility and available for inspection, and the 30-day Rolling Average Removal Efficiency will be reported in accordance with the requirements of the Consent Decree and Appendix B. Equivalent data retention and reporting requirements will be incorporated into the applicable permits for these Units.
- f. Missing Data Substitution of 40 C.F.R Part 75 will not be implemented.
- g. Initial performance testing will be performed before the effective date of the 30-Day Rolling Average Removal Efficiency requirements, and the results will be reported to Plaintiffs as part of the annual report submitted in accordance with Appendix B.

II. Calculation of 30-Day Rolling Average Removal Efficiency

- 1. Removal efficiency shall be calculated by the equation:

$$[\text{SO}_2 \text{ emission rate}_{\text{Inlet}} - \text{SO}_2 \text{ emission rate}_{\text{Outlet}}] / \text{SO}_2 \text{ emission rate}_{\text{Inlet}} * 100$$

- 2. Inlet and outlet emission rates shall be calculated using the methodology specified in 40 C.F.R. Part 60 Appendix B – Method 19. Inlet emission rates will be based on the average of the valid recorded values calculated for each of the inlet FGD monitors at each Unit. Measurements are made on a wet basis, so Equation 19.7 will be utilized to determine the hourly SO₂ emission rate at each location. To make the conversion between the measured wet SO₂ and CO₂ concentrations and an emission rate in pounds per million BTU, an electronic Data System will perform Equation 19.7 using the SO₂ ppm conversion factor from Table 19-1 of Method 19 and the Fc factor for the applicable fuel (currently bituminous coal) in Table 19-2 of Method 19. The resulting equation will be:

$$\text{Emission rate (lb SO}_2\text{/mmBtu)} = 1.660 \times 10^{-7} * \text{SO}_2 \text{ (in ppm)} * \text{Fc} * 100 / \text{CO}_2 \text{ (in \%)}$$

- 3. The electronic data system will calculate the hourly average SO₂ and CO₂ concentration in accordance with 40 C.F.R. Part 75 quality control/quality assurance requirements and will compute and retain these SO₂ emission rates for every operating hour meeting the minimum data capture requirements in accordance with 40 C.F.R. Part 75. Prior to the

calculation of the SO₂ emission rate, hourly SO₂ and CO₂ concentrations will be rounded to the nearest tenth (i.e., 0.1 ppm or 0.1 % CO₂) and the resulting SO₂ emission rate will be rounded to the nearest thousandth (i.e., 0.001 lb/mmBtu).

4. From these hourly SO₂ emission rates, SO₂ removal efficiencies will be calculated for each hour when the Unit is firing fossil fuel, and the hourly SO₂ and CO₂ monitors meet the QA/QC requirements of Part 75. Hourly SO₂ removal efficiencies will be computed by taking the hourly inlet SO₂ emission rate minus the outlet SO₂ emission rate, dividing the result by inlet SO₂ emission rate and multiplying by 100. The resulting removal efficiency will be rounded to the nearest tenth (i.e., 95.1%). Daily SO₂ removal efficiencies will be calculated by taking the sum of Hourly SO₂ removal efficiencies and dividing by the number of valid monitored hours for each Operating Day. The resulting daily removal efficiencies will be rounded to the nearest tenth (i.e., 95.1%).
5. The 30-Day Rolling Average Removal Efficiency will be computed by taking the current Operating Day's daily SO₂ removal efficiency (as described in Paragraph 4 of this Appendix C) plus the previous 29 Operating Days' daily SO₂ removal efficiency, and dividing the sum by 30. In the event that a daily SO₂ removal efficiency is not available for an Operating Day, Defendants shall exclude that Operating Day from the calculation of the 30-Day Rolling Average Removal Efficiency. The resulting 30-day Rolling Average Removal Efficiency will be rounded to the nearest tenth of a percent (i.e., a value of 95.04% rounds down to 95.0%, and a value of 95.05% rounds up to 95.1%).

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PERMIT
R30-0510005-2014

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Permit Number: **R30-05100005-2014**
Permittee: **Kentucky Power Company (d.b.a. American Electric Power)**
Facility Name: **Mitchell Plant**
Permittee Mailing Address: **1 Riverside Plaza, Columbus, Ohio 43215-2373**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Cresap/Moundsville, Marshall County, West Virginia
Facility Mailing Address:	Post Office Box K, Moundsville, West Virginia 26041
Telephone Number:	304-843-6000
Type of Business Entity:	Corporation
Facility Description:	Electric Generation Service
SIC Codes:	Primary 4911; Secondary N/A; Tertiary N/A
UTM Coordinates:	516.00 km Easting • 4409.00 km Northing • Zone 17

Permit Writer: Denton B. McDerment

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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APPENDIX B – Certification of Data Accuracy

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APPENDIX F – Class II General Permit G60-C

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
Boilers & Associated Equipment					
Unit 1	1E	Boiler: Foster Wheeler, Model # 2-85-303	1971	7020 mmBtu/hr	High efficiency ESP, LNB, SCR, FGD
Unit 2	2E	Boiler: Foster Wheeler, Model # 2-85-304	1971	7020 mmBtu/hr	High efficiency ESP, LNB, SCR, FGD
Aux 1	Aux ML1	Boiler: Foster Wheeler, Model # SD-25	1970	663 mmBtu/hr	FGR/LNB
17S	17E	Unit 1 Emergency Diesel Driven Fire Pump	Approx. 1971	230 HP	None
18S	18E	Unit 2 Emergency Diesel Driven Fire Pump	Approx. 1971	230 HP	None
EG-1	EG-1	CAT® C175-16 (Compression Ignition (CI) Engine) Certificate No. ECPXL106.NZS-011 Engine ECPXL106.NZS	2014	3,717-bhp @ 1,800rpm	None
EG-2	EG-2	CAT® 3516C-HD TA (CI Engine) Certificate No. ECPXL78.1NZS-024 Engine ECPXL78.1NZS	2014	3,004-bhp @ 1,800rpm	None
EGT01	EGT01	Diesel Fuel Storage Tank for EG-1	2014	4,800 gallons	None
EGT02	EGT02	Diesel Fuel Storage Tank for EG-2	2014	4,800 gallons	None
Coal & Ash Handling					
BU	BU	Barge Unloader (unload barge onto Conveyor R1)	1971	4,000 TPH	WS, PE, MC
Station R1	Sta-R1	Conveyor R1 and drop points to Conveyor R2	1971	3,000 TPH	FE, MC
C-R2	C-R2	Conveyor R2 (transfer to Station R2)	1971	3,000 TPH	WS, PE, MC
RCU	RCU	Rail Car Unloader (unload rail cars to feeders R6-1, R6-2 and R6-3)	April, 1974	3,000 TPH	WS, MC
R6-1, R6-2, R6-3	R6-1, R6-2, R6-3	Feeders R6-1, R6-2, R6-3 (transfer points to Conveyor R7)	April 1974	1,400 TPH	PE, MC
C-R7	C-R7	Conveyor R7 (transfer to Station R2)	April 1974	3,000 TPH	WS, PE, MC
Station R2	Sta-R2	Drop point to coal crusher or conveyor R3	April 1974	N/A	FE, MC
CR-R2	CR-R2	Coal Crusher	1971	2,500 TPH	FE, MC
C-R3	C-R3	Conveyor R3 (transfer to Station R3)	1971	3,000 TPH	PE, MC
Station R3	Sta-R3	Drop point to conveyor R4 or R11	1971	N/A	FE, MC

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
C-R11	C-R11	Conveyor R11 (transfer to radial portable Conveyor R12)	1971	3,000 TPH	PE, MC
C-R12	C-R12	Radial Portable Conveyor R12 (transfer to temporary storage pile)	1971	3,000 TPH	MC
C-R4	C-R4	Conveyor R4 (transfer to Station R4)	1971	3,000 TPH	PE, MC
Station R4	Sta-R4	Drop point to Sample System and Conveyor R5; and/or Conveyor R8	1971	N/A	FE, MC
C-R8	C-R8	Conveyor R8 (transfer to Radial Stacker Conveyor R9)	April 1974	3,000 TPH	PE, MC
C-R9	C-R9	Radial Stacker Conveyor R9 (transfer to North Yard Storage Pile – Station R7)	April 1974	3,000 TPH	MC
Station R7	Sta-R7	Drop point from North Yard Storage Pile through Crusher R7-1 to Feeder Conveyor BFR7-1	April 1974	N/A	FE, MC
CR-R7-1	CR-R7-1	Coal Crusher	April 1974	1,000 TPH	FE, MC
BFR7-1	BFR7-1	Feeder BFR7-1 (transfer to Conveyor R10)	April 1974	1,100 TPH	FE, MC
C-R10	C-R10	Conveyor R10 (transfer to truck load out and Station R4)	April 1974	1,100 TPH	PE, MC
C-R5	C-R5	Conveyor R5 (transfer to Drive Tower S1)	1971	3,000 TPH	PE, MC
Drive Tower S1	Drive Tower S1	Drop point to Conveyor R6	1971	N/A	FE, MC
C-R6	C-R6	Conveyor R6 (transfer to Station 2)	1971	3,000 TPH	PE, MC
Station 2	Sta-2	Drop point to Radial Stacker Conveyor 2	1969	N/A	FE, MC
RS-2	RS-2	Radial Stacker 2 (transfer to surge pile)	1969	4,000 TPH	WS, MC
Station 1A	Sta-1A	Drop point from frozen coal storage area 4 through crusher CR-1A to Conveyor 1A	1969	N/A	FE, MC
CR-1A	CR-1A	Coal Crusher	1969	1,000 TPH	FE, MC
C-1A	C-1A	Conveyor 1A (transfer to Station 1B)	1969	1,100 TPH	PE, MC
Station 1B	Sta-1B	Drop point to Conveyor 1	1969	N/A	FE, MC
C-1	C-1	Conveyor 1 (transfer to Station 2)	1969	2,600 TPH	PE, MC
CSA-1	CSA-1	Coal Storage Area #1 (Surge Pile)	1969	Approx 40 Acres	MC
CSA-2	CSA-2	Coal Storage Area #2 (North Yard Storage Pile)	April 1974	Approx 40 Acres	MC
CSA-3	CSA-3	Coal Storage Area #3 (Temporary Storage Pile at R3)		Approx 6 Acres	MC
CSA-4	CSA-4	Coal Storage Area #4 (conveyor from 1B)	1969	Included in CSA-1	MC
SGM1 through SGM16	SGM1 through SGM16	Reclaim Hoppers/Vibratory Feeders (Reclaim Area #1 surge pile) transfers to Conveyors 3A, 3B and 3C	1969	300 TPH each	FE, MC
C-3A	C-3A	Conveyor 3A (transfer to Station 3B)	1969	1,100 TPH	FE, MC

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Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
Station 3B	Sta-3B	Drop point to Conveyor 3B	1969	N/A	FE, MC
C-3B	C-3B	Conveyor 3B (transfer to Station 3)	1969	1,100 TPH	FE, MC
C-3C	C-3C	Conveyor 3C (transfer to Station 3)	1969	1,100 TPH	FE, MC
Station 3	Sta-3	Drop point to Conveyors 4E and/or 4W	1969	N/A	FE, MC
C-4E/C-4W	C-4E/C-4W	Conveyors 4E and 4W (transfer to Station 4)	1969	1,100 TPH each	PE, MC
Station 4	Sta-4	Drop point to Sample System, Conveyor 7E and/or 7W, and Conveyor 5 or Emergency Conveyors E25 through E21	1969	N/A	FE, MC
C-7E/C-7W	C-7E/C-7W	Conveyors 7E and 7W (transfer to Station 5)	1969	1,100 TPH each	PE, MC
C-5	C5	Conveyor 5 (transfer to Unit 2 coal silos 3, 4 or 5 and to Conveyor 6)	1969	1,100 TPH	FE, MC
C-6	C-6	Conveyor 6 (transfer to Unit 2 coal silos 1 or 2)	1969	1,100 TPH	FE, MC
C-E25 through C-E21	C-E25 through C-E21	Emergency conveyors E25 through E21 (used in an emergency to transfer coal into Unit 2 coal silos)	1969	500 TPH each	MC
Station 5	Sta-5	Drop point to Conveyor 8 or Emergency Conveyors E11 through E15	1969	N/A	FE, MC
C-8	C-8	Conveyor 8 (transfer to Unit 1 coal silos 3, 4, or 5 and to Conveyor 9)	1969	1,100 TPH	FE, MC
C-9	C-9	Conveyor 9 (transfer to Unit 1 coal silos 1 or 2)	1969	1,100 TPH	FE, MC
C-E11 through C-E15	C-E11 through C-E15	Emergency conveyors E11 through E15 (used in an emergency to transfer coal into Unit 1 coal silos)	1969	500 TPH	MC
Fly Ash Material Handling					
Haul Roads	Haul Roads	Fly Ash Material Haul Roads and Landfill	N/A	N/A	Water Truck
ME-1A	EP-1	Unit 1 Mechanical Exhauster 1A	2012	N/A	Filter/ Separator
ME-1B	EP-2	Unit 1 Mechanical Exhauster 1B	2012	N/A	Filter/ Separator
ME-1C (spare)	EP-3	Unit 1 Mechanical Exhauster 1C	2012	N/A	Filter/ Separator
ME-2A	EP-4	Unit 2 Mechanical Exhauster 2A	2012	N/A	Filter/ Separator
ME-2B	EP-5	Unit 2 Mechanical Exhauster 2B	2012	N/A	Filter/ Separator
ME-2C (spare)	EP-6	Unit 2 Mechanical Exhauster 2C	2012	N/A	Filter/ Separator
FAS-A	EP-7	Fly Ash Silo A	2012	2,160 tons	BVF-A
FAS-B	EP-8	Fly Ash Silo B	2012	2,160 tons	BVF-B
FAS-C	EP-9	Fly Ash Silo C	Future	2,160 tons	BVF-C
WFA-AA	F-1	Transfer conditioned fly ash from Fly Ash Silo A to Truck via Pin/Paddle Mixer	2012	360 tph	MC
WFA-BA	F-2	Transfer conditioned fly ash from Fly Ash Silo B to Truck via Pin/Paddle Mixer	2012	360 tph	MC

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
WFA-CA	F-3	Transfer conditioned fly ash from Fly Ash Silo C to Truck via Pin/Paddle Mixer	Future	360 tph	MC
WFA-AB (spare)	F-4	Transfer conditioned fly ash from Fly Ash Silo A to Truck via Pin/Paddle Mixer	2012	360 tph	MC
WFA-BB (spare)	F-5	Transfer conditioned fly ash from Fly Ash Silo B to Truck via Pin/Paddle Mixer	2012	360 tph	MC
WFA-CB (spare)	F-6	Transfer conditioned fly ash from Fly Ash Silo C to Truck via Pin/Paddle Mixer	Future	360 tph	MC
TC-A	EP-10, F-7	Transfer dry fly ash from Fly Ash Silo A to Truck via Telescopic Chute	2012	300 tph	TC
TC-B	EP-11, F-8	Transfer dry fly ash from Fly Ash Silo B to Truck via Telescopic Chute	2012	300 tph	TC
TC-C	EP-12, F-9	Transfer dry fly ash from Fly Ash Silo C to Truck via Telescopic Chute	Future	300 tph	TC
LPG	LPG	Generac SG080, Lean Burn Four Stroke, Liquid Propane Gas-fired emergency generator Certificate No. DGNXB08.92NL-011	2013	127 bhp	None
LPT	LPT	Liquid Propane tank for LPG	2013	500 gallon	None

1S – Limestone Material Handling

BUN-1	BUN-1 (Fugitive)	Limestone Unloading Crane	2006	1,000 TPH	None
RH-1	RH-1 (Fugitive)	Limestone Unloading Hopper	2006	60 Tons	WS, PE
VF-1	VF-1 (Fugitive)	Limestone Unloading Feeder	2006	750 TPH	FE
BC-1	BC-1 (Fugitive)	Limestone Dock/Connecting Conveyor	2006	750 TPH	PE
TH-1	TH-1 (Fugitive)	Limestone Transfer House #1	2006	750 TPH	FE
BC-2	BC-2 (Fugitive)	Limestone Storage Pile Stacking Conveyor	2006	750 TPH	PE
LSSP	LSSP (Fugitive)	Limestone Active/Long-Term Stockpile	2006/2011	155,000 Tons	None

2S – Gypsum Material Handling

BC-8	BC-8 (Fugitive)	Vacuum Collecting Conveyor	2007	200 TPH	PE
TH-3	TH-3 (Fugitive)	Gypsum Transfer House #3	2007	200 TPH	FE
BC-9	BC-9 (Fugitive)	Connecting Conveyor	2007	200 TPH	PE
TH-4	TH-4 (Fugitive)	Gypsum Transfer House #4	2007	200 TPH	FE
BC-10	BC-10 (Fugitive)	Connecting Conveyor	2007	200 TPH	PE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
TH-5	TH-5 (Fugitive)	Gypsum Transfer House #5	2007	200 TPH	FE
BC-11	BC-11 (Fugitive)	Connecting Conveyor	2007	200 TPH	PE
TH-6	TH-6 (Fugitive)	Gypsum Transfer House #6	2007	200 TPH	FE
BC-12	BC-12 (Fugitive)	Stacking Tripper Conveyor	2007	200 TPH	PE
GSP	GSP (Fugitive)	Gypsum Stockpile	2007	15,600 tons	FE
PSR-1	PSR-1 (Fugitive)	Traveling Portal Scraper Reclaimer	2007	1,000 TPH	FE
BC-14	BC-14 Fugitive)	Reclaim Conveyor	2007	1,000 TPH	PE
TH-7	TH-7 (Fugitive)	Transfer House #7	2007	1,000 TPH	FE
BC-13	BC-13 (Fugitive)	Bypass Conveyor	2007	200 TPH	PE
BC-15	BC-15 (Fugitive)	Connecting Conveyor	2007	1,000 TPH	PE
TH-1	TH-1 (Fugitive)	Transfer House #1	2007	1,000 TPH	FE
BC-16	BC-16 (Fugitive)	Transfer Conveyor	2007	1,000 TPH	PE
BL-1	BL-1 (Fugitive)	Barge Loader	2007	1,000 TPH	PE
BC-14	BC-14 (Fugitive)	Reclaim Conveyor Extension	2007	1,000 TPH	PE
TH-8	TH-8 (Fugitive)	Transfer House 8	2007	1,000 TPH	FE
BC-19	BC-19 (Fugitive)	Transfer Conveyor	2007	1,000 TPH	PE
TH-9	TH-9 (Fugitive)	Transfer House 9	2007	1,000 TPH	FE
BC-20	BC-20 (Fugitive)	Transfer Conveyor to 20	2007	1,000 TPH	PE
TH-10	TH-10 (Fugitive)	Transfer House 10	2007	1,000 TPH	FE
BC-21	BC-21 (Fugitive)	Transfer Conveyor to 21	2007	1,000 TPH	PE
BUN-1	BUN-1 (Fugitive)	Clamshell Unloading Crane	2007	1,000 TPH	
RH-4	RH-4 (Fugitive)	Gypsum Unloading Hopper	2007	30 tons	WS, PE
RP-1	RP-1 (Fugitive)	Gypsum Rotary Plow	2007	750 TPH	FE
BC-17	BC-17 (Fugitive)	Dock/Connecting Conveyor	2007	750 TPH	PE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
TH-7	TH-7 (Fugitive)	Transfer House #7	2007	750 TPH	FE
BC-18	BC-18 (Fugitive)	Bypass Conveyor	2007	750 TPH	PE
TH-6	TH-6 (Fugitive)	Transfer House #6	2007	750 TPH	FE
3S – Limestone Mineral Processing					
VF-2	VF-2 (Fugitive)	Limestone Reclaim Feeder 2	2007	750 TPH	FE
VF-3	VF-3 (Fugitive)	Limestone Reclaim Feeder 3	2007	750 TPH	FE
BC-3	BC-3 (Fugitive)	Limestone Tunnel Reclaim Conveyor	2007	750 TPH	PE
FB-1	FB-1 (Fugitive)	Emergency Limestone Reclaim Feeder/Breaker	2007	750 TPH	
TH-2	TH-2 (Fugitive)	Limestone Transfer House 2	2007	750 TPH	FE
BC-4	BC-4 (Fugitive)	Limestone Silo A Feed Conveyor	2007	750 TPH	PE
BC-5	BC-5 (Fugitive)	Limestone Silo B Feed Conveyor	2007	750 TPH	PE
BC-6	BC-6 (Fugitive)	Limestone Silo C Feed Conveyor (future)	2007	750 TPH	PE
LSB-1	6E	Limestone Silo A	2007	900 Tons	BH
LSB-2	7E	Limestone Silo B	2007	900 Tons	BH
LSB-3	8E	Limestone Silo C (future)	Future	900 Tons	BH
	(Fugitive)	Vibrating Bin Discharger (one per silo)	2007	68.4 TPH	FE
LSWF-1	LSWF-1 (Fugitive)	Limestone Weigh Feeder (one per silo)	2007	68.4 TPH	FE
LSWF-2	LSWF-2 (Fugitive)				
LSWF-3	LSWF-3 (Fugitive)				
	(Fugitive)	Wet Ball Mill (one per silo)	2007	68.4 TPH	FE
4S – Dry Sorbent Material Handling					
	(Fugitive)	Truck Unloading Connection (2)	2007	25 TPH	FE
DSSB 1	10E	Dry Sorbent Storage Silo #1	2007	500 TPH	BH, FE
DSSB 2	11E	Dry Sorbent Storage Silo #2	2007	500 TPH	BH, FE
	(Fugitive)	Aeration Distribution Bins	2007	4.6 TPH	FE
	(Fugitive)	De-aeration Bins	2007	4.6 TPH	FE
	(Fugitive)	Rotary Feeder	2007	4.6 TPH	FE
5S – Coal Blending System					
HTS-1	HTS-1 (Fugitive)	Transfer House #1	2007	3,000 TPH	FE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
HSC-1	HSC-1 (Fugitive)	Stacking Conveyor #1	2007	3,000 TPH	PE
HTS-2A	HTS-2A (Fugitive)	Transfer House #2A	2007	3,000 TPH	FE
HSC-2	HSC-2 (Fugitive)	Stacking Conveyor #2	2007	3,000 TPH	PE
HTS-3	HTS-3 (Fugitive)	Transfer House #3	2007	3,000 TPH	FE
HSC-3	HSC-3 (Fugitive)	Stacking Conveyor #3	2007	3,000 TPH	PE
SH-1	SH-1 (Fugitive)	Stacking Hopper SH-1 Transfer to SC-3 (receive coal from plant radial stacker R9)	2007	3,000 TPH	FE
HSC-3 to High Sulfur Pile (CSA-2, existing)	HSC-3 to High Sulfur Pile (Fugitive) (CSA-2, existing)	Transfer from Stacking Conveyor HSC-3 to High Sulfur Pile at existing North Yard Storage Area (CSA-2)	2007	3,000 TPH	Stacking Tube
HVF-1	HVF-1 (Fugitive)	Coal Reclaim Feeder 1	2007	800 TPH	FE
HVF-2	HVF-2 (Fugitive)	Coal Reclaim Feeder 2	2007	800 TPH	FE
HVF-3	HVF-3 (Fugitive)	Coal Reclaim Feeder 3	2007	800 TPH	FE
HVF-4	HVF-4 (Fugitive)	Coal Reclaim Feeder 4	2007	800 TPH	FE
HVF-1 through HVF-4 to HRC-1 (Transfer)	HVF-1 through HVF-4 to HRC-1 (Fugitive) (Transfer)	Transfer from Vibrating Feeders HVF-1 through HVF-4 to Reclaim Conveyor HRC-1	2007	1,600 TPH	FE
HRC-1	HRC-1 (Fugitive)	Coal Tunnel Reclaim Conveyor	2007	1,600 TPH	PE
HTS-2B	HTS-2B (Fugitive)	Coal Transfer House #2B	2007	1,600 TPH	FE
HRC-2	HRC-2 (Fugitive)	Reclaim Conveyor #2	2007	1,600 TPH	PE
HTS-4	HTS-4 (Fugitive)	Coal Transfer House #4	2007	1,600 TPH	FE
HRC-3	HRC-3 (Fugitive)	Reclaim Conveyor #3	2007	1,600 TPH	PE
HTS-5	HTS-5 (Fugitive)	Coal Transfer House #5	2007	1,600 TPH	FE
SB-1	SB-1 (Fugitive)	Surge Bin #1	2007	80 Tons	FE
HBF-1A	HBF-1A (Fugitive)	Belt Feeder 1A	2007	800 TPH	PE
HBF-1B	HBF-1B (Fugitive)	Belt Feeder 1B	2007	800 TPH	PE

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Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
HBF-1A/1B to BF-4E/4W	HBF-1A/1B to BF-4E/4W (Fugitive)	Transfer from Belt Feeders HBF-1A and HBF-1B to Existing Coal Conveyors 4E and 4W	2007	1,600 TPH	FE
6S, 7S – Emergency Quench Water System					
6S	15E	Diesel Engine on Quench Pump #1	2007 ¹	60 HP (approx.)	FE
7S	16E	Diesel Engine on Quench Pump #2	2007 ²	60 HP (approx.)	FE
9S – Magnesium Hydroxide Material Handling System					
MHM-1	MHM-1	Magnesium Hydroxide Mix Tank #1	2007	1,000 Gal.	N/A
MHM-2	MHM-2	Magnesium Hydroxide Mix Tank #2	2007	1,000 Gal.	N/A
11S – Wastewater Treatment Material Handling					
	Fugitive	Truck Unloading Connection (2)	2007	25 TPH	FE
	24E	Lime Storage Silo #1	2007	100 TPH	BH, FE
	25E	Lime Storage Silo #2	2007	100 TPH	BH, FE
	Fugitive	Wastewater Treatment Cake Stockpile	2007	3,600 Tons	Building Enclosure
FB-2	Fugitive	Filter Cake Feeder/Breaker	2007	600 TPH	PE
BC-22	Fugitive	Transfer Conveyor 22	2007	600 TPH	PE
TH-12	Fugitive	Transfer House #12	2007	600 TPH	PE
Tank #1	Tank #1	Ignition Oil Tank – S. of U1 Cooling Tower	~1975	1,500,000 Gal.	N/A
Tank #2	Tank #2	Ignition Oil Tank – N. of U2 Cooling Tower	1971	500,000 Gal.	N/A
Tank #3	Tank #3	Ignition Oil Tank – N. of U2 Cooling Tower	1971	500,000 Gal.	N/A
Tank #5	Tank #5	Used Oil Tank – Tractor Shed	~2000	500 Gal.	N/A
Tank #6	Tank #6	Sulfuric Acid Tank – W. of Units 1&2	1971	15,000 Gal.	N/A
Tank #7	Tank #7	Ammonium Hydroxide Tank – W. of Units 1&2	1971	4,750 Gal.	N/A
Tank #11	Tank #11	No.2 Fuel Oil Tank – Coal Transfer Station #3	2007	1,000 Gal.	N/A
Tank #12	Tank #12	No.2 Fuel Oil Tank – Coal Transfer Station R-2	~2004	3,000 Gal.	N/A
Tank #13	Tank #13	No.2 Fuel Oil Tank – Coal Transfer Station R-4	~2004	3,000 Gal.	N/A
Tank #14	Tank #14	No.2 Fuel Oil Tank – Drain Receiver Tank	1969	400 Gal.	N/A
Tank #15	Tank #15	Gasoline Tank – Main Plant Entrance	1991	8,000 Gal.	N/A
Tank #16	Tank #16	Diesel Fuel Tank – Tractor Shed	2014	10,000 Gal.	N/A
Tank #17	Tank #17	Turbine Oil Tank – U1	1971	~14,000 Gal.	N/A
Tank #18	Tank #18	Turbine Oil Tank – U2	1971	~14,000 Gal.	N/A
Tank #19	Tank #19	Lube Oil Tank – U1	1971	~20,000 Gal.	N/A
Tank #20	Tank #20	Lube Oil Tank – U2	1971	~18,000 Gal.	N/A
Tank #21	Tank #21	Chemical Cleaning Solution Tank	1989	1,000,000 Gal.	N/A

¹ Construction commenced (as defined in 40 C.F.R. §63.2) on or about June 14, 2004 for engine 6S.

² Construction commenced (as defined in 40 C.F.R. §63.2) on or about June 14, 2004 for engine 7S.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed ¹	Design Capacity ²	Control Device ³
Tank #22	Tank #22	EHC System Oil Tank – U1	1971	200 Gal.	N/A
Tank #23	Tank #23	New Lube Oil Tank – U1	1971	1,000 Gal.	N/A
Tank #24	Tank #24	Used Oil Bulk Tank – U0	~2002	275 Gal.	N/A
Tank #25	Tank #25	EHC System Oil Tank – U2	1971	625 Gal.	N/A
Tank #26	Tank #26	New Lube Oil Tank – U2	1971	1,000 Gal.	N/A
Tank #27	Tank #27	Used Oil Bulk Tank – U2	~2002	275 Gal.	N/A
Tank #28	Tank #28	Diesel Fire Pump Fuel Tank – U1	1971	275 Gal.	N/A
Tank #29	Tank #29	Diesel Fire Pump Fuel Tank – U2	1971	275 Gal.	N/A
Tank #30	Tank #30	3 Compartment Oil Tank – Tractor Shed Oil Room	~1995	920 Gal.	N/A
Tank #31	Tank #31	Single Compartment Oil Tank – Tractor Shed	~1995	560 Gal.	N/A
Tank #33	Tank #33	Urea Receiving Hopper	2007	45 tons	FE
Tank #34	Tank #34	No.2 Fuel Oil Tank – Drain Receiver Tank – overflow tank	2001	1,000 Gal.	N/A
Tank #35	Tank #35	TK103-100 Urea Solution Storage Tank	2007	200,000 Gal.	N/A
Tank #36	Tank #36	TK102-100 Urea Mix Tank	2007	2,700 Gal.	N/A
Tank #37	Tank #37	CPS Lime Slurry Tank #1	2007	750 Gal.	N/A
Tank #38	Tank #38	CPS Lime Slurry Tank #2	2007	750 Gal.	N/A
Tank #39	Tank #39	CPS Equalization Tank #1	2007	254,513 Gal.	N/A
Tank #40	Tank #40	CPS Equalization Tank #2	2007	254,513 Gal.	N/A
Tank #41	Tank #41	CPS Ferric Chloride Mix Tank #1	2007	9,200 Gal.	N/A
Tank #42	Tank #42	CPS Ferric Chloride Mix Tank #2	2007	9,200 Gal.	N/A
Tank #43	Tank #43	CPS Ferric Chloride Bulk Storage Tank	2007	8,800 Gal.	N/A
Tank #44	Tank #44	CPS Acid Bulk Storage Tank	2007	10,575 Gal.	N/A
Tank #45	Tank #45	CPS Polymer Totes (2)	2007	225 Gal. (each)	N/A
Tank #46	Tank #46	Emergency Quench Pump #1 Diesel Tank	2007	70 Gal.	N/A
Tank #47	Tank #47	Emergency Quench Pump #2 Diesel Tank	2007	70 Gal.	N/A
Tank #49	Tank #49	No. 2 Fuel Tank – SW Corner of CSA-2	2008	2000 Gal.	N/A
Tank #50	Tank #50	Gypsum Storage Building Fuel Oil Tank	2009	1,000 gal.	None
Tank #51	Tank #51	Highway Grade Diesel Tank #1	2011	1,000 gal.	None
Tank #52	Tank #52	Limestone Storage Pile Diesel Tank #1	2011	500 gal.	None
19S	Fugitive	Rock Salt Storage Pile (roadway ice control)	2010	50 tons	Enclosure

¹ “Year Installed” reflects the “commenced” construction or modification date as defined in 40 C.F.R. Part 60.

² Rated Design Capacity

³ Control Device/Control System abbreviations: ESP = Electrostatic Precipitators, LNB = Low NOx Burners, SCR = Selective Catalytic Reduction, FGD = Flue Gas Desulfurization, FE = Full enclosure, PE = Partial Enclosure, BH = Baghouse(s), MC = Moisture Content, WS = Wetting Spray, TC = Telescopic Chute, BVF = Bin Vent Filter, TS = Vacuum/Pressure Transfer Stations, N/A = Not applicable

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2608E	May 12, 2014
G60-C057A	August 8, 2014

2.0 General Conditions

2.1 Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2 Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LEE	Low-emitting EGU	USEPA	United States Environmental Protection Agency
LDAR	Leak Detection and Repair	UTM	Universal Transverse Mercator
m	Thousand	VEE	Visual Emissions Evaluation
MACT	Maximum Achievable Control Technology	VOC	Volatile Organic Compounds
mm	Million		
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source 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 (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee 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. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission 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 operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated 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 to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. **Fugitive Particulate Matter Control.** No person shall cause, suffer, allow, or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

- a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;
- b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and
- c. Ash or fuel handling systems and ash disposal areas.
- d. Flue Gas Desulfurization (FGD) and Selective Catalytic Reduction (SCR) material handling systems.

[45CSR§2-5; 45CSR13, R13-2608, 4.1.18.]

- 3.1.10. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed within Emission Groups 1S, 2S, 3S, 4S, 5S, 6S, 7S, 9S, and 11S, and emission unit Aux 1 in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13, R13-2608, 4.1.25. and 5.1.2; 45CSR§13-5.11.]

- 3.1.11. ~~CAIR NO_x Annual Trading Program (UNIT 1 and UNIT 2).~~ The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix E) and the CAIR permit requirements set forth in 45CSR39 for each CAIR NO_x Annual source. ~~The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.~~

~~**[45CSR§§39-6.1.b. and 20.1.]**~~

- a. ~~The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§39-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_x Annual allowance to or from the compliance account of the CAIR NO_x Annual source covered by the permit.~~

~~**[45CSR§39-23.2.]**~~

- b. ~~Except as provided in 45CSR§39-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.~~

~~**[45CSR§39-24.1.]**~~

TR NO_x Annual Trading Program. The permittee shall comply with the standard requirements set forth in the attached Transport Rule (TR) Trading Program Title V Requirements (see Appendix E).
[40 C.F.R. §97.406]

- 3.1.12. ~~CAIR NO_x Ozone Season Trading Program (UNIT 1, UNIT 2, and AUX 1).~~ The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix E) and the CAIR permit requirements set forth in 45CSR40 for each CAIR NO_x Ozone Season source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.
~~[45CSR§§40-6.1.b. and 20.1.]~~

a. ~~The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§40-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from the compliance account of the CAIR NO_x Ozone Season source covered by the permit.~~
~~[45CSR§40-23.2.]~~

b. ~~Except as provided in 45CSR§40-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.~~
~~[45CSR§40-24.1.]~~

TR NO_x Ozone Season Trading Program. The permittee shall comply with the standard requirements set forth in the attached Transport Rule (TR) Trading Program Title V Requirements (see Appendix E).
[40 C.F.R. §97.506]

- 3.1.13. ~~CAIR SO₂ Trading Program (UNIT 1 and UNIT 2).~~ The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix E) and the CAIR permit requirements set forth in 45CSR41 for each CAIR SO₂ source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.
~~[45CSR§§41-6.1.b. and 20.1.]~~

a. ~~The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§41-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from the compliance account of the CAIR SO₂ source covered by the permit.~~
~~[45CSR§41-23.2.]~~

b. ~~Except as provided in 45CSR§41-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.~~
~~[45CSR§41-24.1.]~~

TR SO₂ Group 1 Trading Program. The permittee shall comply with the standard requirements set forth in the attached Transport Rule (TR) Trading Program Title V Requirements (see Appendix E).
[40 C.F.R. §97.606]

3.2. Monitoring Requirements

- 3.2.1. Reserved.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
 - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
 - d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- The date, place as defined in this permit and time of sampling or measurements;
 - The date(s) analyses were performed;
 - The company or entity that performed the analyses;
 - The analytical techniques or methods used;
 - The results of the analyses; and
 - The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

[45CSR13, R13-2608, 4.4.1.] (Emission Groups 1S, 2S, 3S, 4S, 5S, 6S, 7S, 9S, and 11S)

[45CSR13, R13-2608, 5.4.1.] (Em. Unit ID: Aux 1)

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated as necessary and maintained in good working order. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.

[45CSR§30-5.1.c.]

- 3.4.5. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed within Emission Groups 1S, 2S, 3S, 4S, 5S, 6S, 7S, 9S, and 11S in Section 1.0 and control equipment for the Auxiliary Boiler (Aux 1), the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2608, 4.4.2. and 5.4.2.]

3.4.6. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed within Emission Groups 1S, 2S, 3S, 4S, 5S, 6S, 7S, 9S, and 11S in Section 1.0 and control equipment for the Auxiliary Boiler (Aux 1), the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2608, 4.4.3. and 5.4.3.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]
- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.
- 3.5.8. **Deviations.**
- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. There is no compliance plan since a responsible official certified compliance with all applicable requirements in the Title V renewal application.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
 - a. **45CSR5 – To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas.** Since the facility is subject to 45CSR2, according to 45CSR§5-2.4.b. the facility is not included in the definition of a “Coal Preparation Plant”. Therefore, 45CSR5 does not apply to the facility, and particularly to its coal crushing operations and associated coal handling.
 - b. **45CSR7 – To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations.** Since the facility is subject to 45CSR2, 45CSR§7-10.1. provides an exemption from 45CSR7.

- c. **45CSR17 – To Prevent and Control Particulate Matter Air Pollution from Material Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter.** The facility is characterized by the handling and storage of materials that have the potential to produce fugitive particulate if not properly controlled. However, since the facility is subject to 45CSR2, it is not subject to this rule in accordance with the exemption granted in 45CSR§17-6.1.
- d. **40 C.F.R. 60 Subpart D – Standards of Performance for Fossil-fuel-fired Steam Generators for which Construction is Commenced after August 17, 1971.** The fossil-fuel-fired steam generators potentially affected by this rule have not commenced construction or modification after August 17, 1971. Therefore, the units do not meet the applicability criteria under §60.40(c), and hence the NSPS does not apply.
- e. **40 C.F.R. 60 Subpart Da – Standards of Performance for Electric Utility Steam Generating Units for which Construction is Commenced After September 18, 1978.** The electric utility steam generating units (i.e., Unit 1 and Unit 2) potentially affected by this rule have not commenced construction or modification after September 18, 1978. Therefore, the units do not meet the applicability criteria under §60.40Da(a)(2), and hence the NSPS does not apply to Unit 1 and Unit 2. The auxiliary boiler (Aux 1) was not constructed or reconstructed “for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW net-electrical output to any utility power distribution system for sale.” As such, Aux 1 does not meet the definition of an *Electric utility steam-generating unit* in §60.41Da, and therefore, does not meet the applicability criteria of §60.40Da(a). Consequently, NSPS Subpart Da does not apply to Aux 1.
- f. **40 C.F.R. 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.** The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 C.F.R. §60.111(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after June 11, 1973 and prior to May 19, 1978. Therefore, the tanks do not meet the applicability criteria under §60.110, and hence the NSPS does not apply.
- g. **40 C.F.R. 60 Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.** The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 C.F.R. §60.111a(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after May 18, 1978 and prior to July 23, 1984. Therefore, the tanks do not meet the applicability criteria under §60.110a(a), and hence the NSPS does not apply.
- h. **40 C.F.R. 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.** Storage vessels potentially affected by this rule are exempted because they contain liquids with a maximum true vapor pressure of less than 3.5 kPa, have a storage capacity of less than 75 cubic meters, or have not commenced construction, reconstruction or modification after July 23, 1984. Therefore, the tanks do not meet the applicability criteria under §60.110b, and hence the NSPS does not apply.

- i. **40 C.F.R. 60 Subpart Y – *Standards of Performance for Coal Preparation Plants*.** The coal handling equipment potentially affected by this rule has not been constructed or modified after October 24, 1974. Therefore, the equipment does not meet the applicability criteria set forth in 40 C.F.R. §60.250(b), and hence this NSPS does not apply.

- j. **40 C.F.R. 63 Subpart Q – *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*.** This facility does not include *industrial process cooling towers* that have operated with chromium-based water treatment chemicals. Therefore, the facility does not meet the applicability criteria set forth in §63.400(a), and hence this MACT does not apply to the facility.

4.0 Main Boilers [Em. Unit IDs *Unit 1* and *Unit 2* – Em. Pt. IDs *1E* and *2E*]; Auxiliary Boiler [Em. Unit ID *Aux 1* – Em. Pt. ID *Aux MLI*]

4.1. Limitations and Standards

4.1.1. Emergency Operating Scenarios

- a. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary to comply with the visible emission requirements or any emergency situation or condition creating a threat to public safety or welfare, the Secretary may grant an exemption to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during that period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the weight emission requirements will not be exceeded during the exemption period.

[45CSR§2-10.1.]

- b. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, SO₂ emissions from the main boilers and auxiliary boiler exceeding those provided for in 45CSR§§10-3.1.b. and 3.1.e., respectively, may be permitted by the Secretary for periods not to exceed ten (10) days upon specific application to the Secretary. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Secretary, provided a corrective program has been submitted by the owner or operator and approved by the Secretary.

[45CSR§10-9.1.]

- 4.1.2. **Thermal Decomposition of Boiler Cleaning Solutions.** The thermal decomposition of boiler cleaning solutions is permitted upon notification to the Secretary, provided that records are maintained which show that the solutions are non-hazardous materials and that the combustion of such solutions does not produce hazardous compounds or emissions. Such records shall be kept on site for a period of no less than five (5) years and shall be made available, in a suitable form for inspection, to the Secretary upon request. See Appendix C.

[WVDAQ Letter dated September 3, 2002 addressed to Mr. Greg Wooten and signed by Jesse D. Adkins - State-Enforceable only]

- 4.1.3. Any fuel burning unit(s) including associated air pollution control equipment, shall at all times, including periods of start-up, shutdowns, and malfunctions, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR§2-9.2.]

- 4.1.4. Visible Emissions from Unit 1 & 2 stacks shall not exceed ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.]

- 4.1.5. The visible emission standards (condition 4.1.4.) shall apply at all times except in periods of start-ups, shutdowns and malfunctions.

[45CSR§2-9.1.]

- 4.1.6. [a.](#) Particulate matter emissions from Unit 1 & 2 stacks shall not exceed 702 lb/hr. The averaging time shall be the arithmetic average of three (3) complete sampling runs consisting of a minimum total sampling time of two (2) hours per run.
[45CSR§2-4.1.a.; 45CSR2-Appendix §§ 4.1.b. & 4.1.c.]
- [b.](#) **Filterable Particulate Matter (PM) Emission Limitation for 40 C.F.R. 63 Subpart UUUUU.** If your EGU is in the coal-fired unit not low rank virgin coal subcategory, for filterable particulate matter (PM), you must meet the emission limit 0.030 lb/MMBtu or 0.30 lb/MWh, by collecting a minimum of 1 dscm per run according to applicable test methods in Table 5 to Subpart UUUUU. For LEE emissions testing for total PM, the required minimum sampling volume must be increased nominally by a factor of two.
[40 C.F.R. §63.9991(a)(1), Table 2, Item #1.a.; 40 C.F.R. §63.10000(a); 45CSR34] (Unit 1 and Unit 2)
- 4.1.7. [a.](#) Sulfur dioxide emissions from Unit 1 and Unit 2 stacks (Em. Pt. IDs: 1E, 2E) shall not exceed a heat input weighted average of 1.2 lb/mmBtu SO₂ on a 3-hour block average basis, with SO₂ mass emissions not to exceed an average of 20,485.2 lb SO₂/hr on a 3-hour block average basis. *Compliance with this limitation will assure compliance with the 45CSR10 limitation of 7.5 lb/mmBtu.*
[45CSR§30-12.7.; 45CSR§§10-3.1., and 3.1.b.]
- [b.](#) **Sulfur Dioxide (SO₂) Emission Limitation for 40 C.F.R. 63 Subpart UUUUU.** If your EGU is in the coal-fired unit not low rank virgin coal subcategory, for sulfur dioxide (SO₂), you must meet the emission limit 0.20 lb/MMBtu, using SO₂ CEMS according to applicable methods in Table 5 and procedures in Table 7 to 40 C.F.R. 63 Subpart UUUUU.
- You may use the alternate SO₂ limit in Table 2 to 40 C.F.R. 63 Subpart UUUUU only if your EGU:
- [\(1\) Has a system using wet or dry flue gas desulfurization technology and SO₂ continuous emissions monitoring system \(CEMS\) installed on the EGU; and](#)
 - [\(2\) At all times, you operate the wet or dry flue gas desulfurization technology and the SO₂ CEMS installed on the EGU consistent with 40 C.F.R. §63.10000\(b\) \(permit condition 4.1.20.\).](#)
- [40 C.F.R. §63.9991(a)(1), Table 2, Item #1.b.; 40 C.F.R. §63.10000(a); 40 C.F.R. §§63.9991(c)(1) and (2); 45CSR34] (Unit 1 and Unit 2)**
- 4.1.8. Compliance with the allowable sulfur dioxide emission limitations from the Unit 1 & 2 boilers [in condition 4.1.7.a.](#) shall be based on a continuous twenty-four (24) hour averaging time. Emissions shall not be allowed to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month. During this one (1) continuous twenty-four hour period, emissions shall not be allowed to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.1.9. The following conditions and requirements are specific to the Boiler Aux-1:

a. Emissions from the boiler shall not exceed the following limits:

Pollutant	lb/hr	tpy
SO ₂	39.78 ¹	17.42
NO _x	99.45	43.56
CO	206.86	90.60
VOC	0.95	0.41
PM (filterable + condensable)	15.63 ²	6.85
PM ₁₀ (filterable + condensable)	10.90	4.77
PM _{2.5} (filterable + condensable)	7.34	3.22
CO ₂	105,606.4	46,255.6
N ₂ O	0.88	0.38
CH ₄	4.38	1.92
CO _{2e} (Total)	105,971.18	46,413.72
Formaldehyde	0.29	0.13
Benzene	0.01	0.01
Ethylbenzene	0.01	0.01
Toluene	0.03	0.02
Xylene	0.01	0.01
Naphthalene	0.01	0.01

¹ This limit makes 40 C.F.R. §60.42b(k)(2) applicable and excludes the unit from limitations of 40 C.F.R. §60.42b(k)(1). This limit satisfies the limitation in 45CSR§10-3.1.b. (4,972.5 lb/hr of SO₂).

² Compliance with this PM limitation ensures compliance with the 45CSR§2-4.1.b. limit of 59.67 lb/hr. [45CSR§2-4.1.b.; 45CSR§10-3.1.b.]

- b. Boiler Aux-1 shall be fitted with Low NO_x burners and shall utilize Flue Gas Recirculation.
- c. The permittee shall limit the annual capacity of the boiler to no more than 10 percent by limiting the annual average heat input of the boiler to 580,788 MMBtu per year. Compliance with this limit shall be satisfied through compliance with the annual fuel usage limit in item d of this condition. [40 C.F.R. §60.44b(e); 45CSR16; 40 C.F.R. §63.7575; 45CSR34; 45CSR§2-8.4.a.1.]
- d. For the purpose of complying with the SO₂ limits in item a of this condition, the Boiler Aux-1 shall not consume more than 4,736 gallons of fuel oil (distillate oil) per hour nor more than 4,148,736 gallons per year. Such fuel oil can not contain more than 600 ppm or 0.06 % of sulfur, which makes the sulfur dioxide potential for this unit at no greater than 0.06 lb/MMBtu. [40 C.F.R. §60.42b(k)(2), §60.43b(h)(5), and §60.48b(j)(2); 45CSR16; 45CSR§10-10.2]
- e. Opacity from boiler shall not exceed 20% based on a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity, except during periods of startup, shutdown, or malfunction. [40 C.F.R. §§60.43b(f) & (g); 45CSR16]
- f. Visible emissions from the boiler shall not exceed 10 percent opacity based on a six minute block average, except during periods of startup, shutdown, or malfunction. [45CSR§§2-3.1. and 9.1.]

[45CSR13, R13-2608, 5.1.1.]

4.1.10. Compliance with the allowable sulfur dioxide emission limitations from the auxiliary boiler shall be based on a continuous twenty-four (24) hour averaging time. Emissions shall not be allowed to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month. During this one (1) continuous twenty-four hour period, emissions shall not be allowed to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.

[45CSR§10-3.8.]

4.1.11. **Combustion of Demineralizer Resins.** The combustion of demineralizer resins is permitted in accordance with the WVDAQ letter dated January 21, 2004 addressed to Mr. Frank Blake and signed by Jesse D. Adkins and subject to the DAQ notification requirements as outlined in the document titled “American Electric Power Demineralizer Resin Burn Notification Procedure.” Records pertaining to the combustion of demineralizer resins shall be kept in accordance with 3.3.2. and shall be made available, in a suitable form for inspection, to the Secretary upon request. See Appendix D.

[WVDAQ Letter dated January 21, 2004 addressed to Mr. Frank Blake and signed by Jesse D. Adkins - State-Enforceable only; 45CSR§30-5.1.c.]

4.1.12. **Dry Sorbent Injection.** The permittee shall operate the SO₃ dry-sorbent injection control system consistent with the technological capabilities and limitations of the system and with good operation and maintenance practices whenever *Unit 1* or *Unit 2* (or both) is operating, except during periods of startup, shut-down, malfunction, and maintenance.

[45CSR§30-12.7., State-enforceable only]

4.1.13. **Compliance Date for 40 C.F.R. 63 Subpart DDDDD.** If you have an existing boiler or process heater, you must comply with 40 C.F.R. 63 Subpart DDDDD no later than January 31, 2016, except as provided in 40 C.F.R. §63.6(i).

[40 C.F.R. §63.7495(b); 45CSR34; 45CSR13, R13-2608, 5.1.1.g.] (*Aux 1*)

4.1.14. **Initial and Periodic Tune-ups under 40 C.F.R. 63 Subpart DDDDD.** If your boiler meets the definition of limited-use boiler or process heater in 40 C.F.R. §63.7575, you must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of 40 C.F.R. §63.7540 (paragraphs (i) through (vi) of this condition) to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph (i) of this condition until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;

- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the 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). Measurements may be taken using a portable CO analyzer; and
 - (vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (vi)(A) and (B) of this condition.
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - (B) A description of any corrective actions taken as a part of the tune-up.
- If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
 - Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up.
 - You must complete an initial tune-up by following the procedures described in paragraphs (i) through (vi) of this condition no later than the compliance date specified in 40 C.F.R. §63.7495(b) (condition 4.1.13.), except as specified in paragraph (j) of 40 C.F.R. §63.7510.

[40 C.F.R. §§ 63.7500(c), 63.7540(a)(10), 63.7540(a)(12), 63.7540(a)(13), 63.7505(a), 63.7510(e), 63.7515(d); 45CSR34; 45CSR13, R13-2608, 5.1.1.g. and 5.4.4.] (Aux I)

4.1.15. ~~Reserved. 40 C.F.R. 63 Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units.~~

- ~~a. The Unit 1 and Unit 2 boilers [Em. Pt. IDs: 1E and 2E] shall comply with all applicable requirements for existing affected sources, pursuant to 40 C.F.R. 63, Subpart UUUUU, “National Emission Standards for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units” no later than the existing source compliance date of April 16, 2015, or as amended by US EPA.~~
- ~~b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 C.F.R. 63, Subpart UUUUU, the permittee shall also submit a complete application for a significant modification to the Title V permit to incorporate the specific requirements of the regulation no later than the maximum time allowed for the NOCS submittal in 40 C.F.R. §63.10030(e).~~

~~[40 C.F.R. 63, Subpart UUUUU; 45CSR§30-6.5.b.]~~

4.1.16. Mercury (Hg) Emission Limitation for 40 C.F.R. 63 Subpart UUUUU. If your EGU is in the coal-fired unit not low rank virgin coal subcategory, for mercury (Hg), you must meet the emission limit 1.2 lb/TBtu, or 0.013 lb/GWh using either of the following:

- (1) LEE testing for 30 days per Table 2 to Subpart UUUUU using applicable methods in Table 5 to Subpart UUUUU, or
- (2) Hg CEMS or sorbent trap monitoring system only, using applicable methods in Table 5 to Subpart UUUUU.

[40 C.F.R. §63.9991(a)(1), Table 2, Item #1.c.; 40 C.F.R. §63.10000(a); 45CSR34] (Unit 1 and Unit 2)

- 4.1.17. **Tune-up Work Practice Standard for 40 C.F.R. 63 Subpart UUUUU.** If your EGU is an existing EGU, you must conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, as specified in 40 C.F.R. §63.10021(e).

Conduct periodic performance tune-ups of your EGU(s), as specified in paragraphs (1) through (9) of this condition. For your first tune-up you may delay the burner inspection until the next scheduled EGU outage provided you meet the requirements of §63.10005. Subsequently, you must perform an inspection of the burner at least once every 36 calendar months unless your EGU employs neural network combustion optimization during normal operations in which case you must perform an inspection of the burner and combustion controls at least once every 48 calendar months. If your EGU is offline when a deadline to perform the tune-up passes, you shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit.

- (1) As applicable, inspect the burner 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 NO_x and 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 NO_x and CO may be installed on a schedule determined by the operator;
- (2) 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;
- (3) 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;
- (4) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors;
- (5) 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 O₂ 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;
- (6) Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, 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, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles;

- (7) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x 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). You may use portable CO, NO_x and O₂ monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system.
- (8) You must maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (1) through (9) of 40 C.F.R. §§63.10021(e) (permit condition 4.1.17.) including:
- (i) The concentrations of CO and NO_x in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems;
- (ii) A description of any corrective actions taken as a part of the combustion adjustment; and
- (iii) 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.
- (9) Report the dates of the initial and subsequent tune-ups in hard copy, as specified in §63.10031(f)(5), until April 16, 2017. After April 16, 2017, report the date of all tune-ups electronically, in accordance with §63.10031(f). The tune-up report date is the date when tune-up requirements in paragraphs (6) and (7) of this condition are completed.

[40 C.F.R. §63.9991(a)(1), Table 3, Item #1; 40 C.F.R. §§63.10021(e)(1) through (9); 40 C.F.R. §63.10021(a), Table 7, Item #5; 40 C.F.R. §63.10000(e); 40 C.F.R. §63.10006(i)(1); 45CSR34] (Unit 1 and Unit 2)

4.1.18. **Startup Work Practice Standard for 40 C.F.R. 63 Subpart UUUUU.**

- a. (1) If you choose to comply using paragraph (1) of the definition of “startup” in §63.10042, you must operate all CMS during startup. 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). For startup of a unit, you must use clean fuels as defined in §63.10042 for ignition. Once you convert to firing coal, residual oil, or solid oil-derived fuel, you must engage all of the applicable control technologies except dry scrubber and SCR. You must start your dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. You must comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in this subpart. You must keep records during startup periods. You must provide reports concerning activities and startup periods, as specified in §§63.10021(h) and (i) (permit conditions 4.1.22. and 4.5.14.a.(1)).

- c. If you choose to use just one set of sorbent traps to demonstrate compliance with the applicable Hg emission limit, you must comply with the limit at all times; otherwise, you must comply with the applicable emission limit at all times except for startup and shutdown periods.
- d. You must collect monitoring data during startup periods, as specified in §63.10020(a) (permit conditions 4.2.18., 4.2.19., and 4.2.20.). You must keep records during startup periods, as provided in §§63.10032 and 63.10021(h) (permit conditions 4.4.10. through 4.4.17, and 4.1.22.). You must provide reports concerning activities and startup periods, as specified in §§63.10021(i) (permit condition 4.5.14.a.(1)), and 63.10031 (permit condition 4.5.14.).

[40 C.F.R. §63.9991(a)(1), Table 3, Items 3.a.(1), 3.c., 3.d.; 40 C.F.R. §63.10021(a), Table 7, Item #6; 40 C.F.R. §63.10000(a); 45CSR34] (Unit 1 and Unit 2)

- 4.1.19. **Shutdown Work Practice Standard for 40 C.F.R. 63 Subpart UUUUU.** You must operate all CMS during shutdown. You must also collect appropriate data, and you must calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used.

While firing coal, residual oil, or solid oil-derived fuel during shutdown, you must 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, residual oil, or solid oil-derived fuel being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, you must operate your controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than this Subpart and that require operation of the control devices.

If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defined in §63.10042 and must be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity.

You must comply with all applicable emission limits at all times except during startup periods and shutdown periods at which time you must meet this work practice. You must collect monitoring data during shutdown periods, as specified in §63.10020(a). You must keep records during shutdown periods, as provided in §§63.10032 and 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. You must provide reports concerning activities and shutdown periods, as specified in §§63.10021(i), and 63.10031.

[40 C.F.R. §63.9991(a)(1), Table 3, Item #4; 40 C.F.R. §63.10021(a), Table 7, Item #7; 40 C.F.R. §63.10000(a); 45CSR34] (Unit 1 and Unit 2)

- 4.1.20. At all times you must operate and maintain any 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.

[40 C.F.R. §63.10000(b); 45CSR34] (Unit 1 and Unit 2)

4.1.21. Fuel Requirements for startup and shutdown.

- (1) You must determine the fuel whose combustion produces the least uncontrolled emissions, i.e., the cleanest fuel, either natural gas or distillate oil, that is available on site or accessible nearby for use during periods of startup or shutdown.
- (2) Your cleanest fuel, either natural gas or distillate oil, for use during periods of startup or shutdown determination may take safety considerations into account.

[40 C.F.R. §63.10011(f); 45CSR34] (Unit 1 and Unit 2)

4.1.22. You must follow the startup or shutdown requirements as given in Table 3 to 40 C.F.R. 63 Subpart UUUUU for each coal-fired, liquid oil-fired, or solid oil-derived fuel-fired EGU.

- (1) You may use the diluent cap and default gross output values, as described in §63.10007(f) (permit condition 4.2.16.), during startup periods or shutdown periods.
- (2) You must operate all CMS, collect data, calculate pollutant emission rates, and record data during startup periods or shutdown periods.
- (3) You must report the information as required in §63.10031 (permit conditions 4.5.14., 4.5.15., 4.5.16., and 4.5.17.).

[40 C.F.R. §63.10021(h); 45CSR34] (Unit 1 and Unit 2)

4.1.23. Selective Catalytic Reactors and Flue Gas Desulfurization.

- (1) On and after January 1, 2009, install and continuously operate Selective Catalytic reactors (SCRs) on Mitchell Units 1 and 2.
- (2) On and after December 31, 2007, install and continuously operate Flue Gas Desulfurization (FGD) on Mitchell Units 1 and 2.
- (3) Pursuant to the consent decree, “continuously operate” means that when the SCR and/or FGD is used at a unit, except during a “malfunction,” the FGD and/or SCR shall be operated at all times the unit is in operation, consistent with the technological limitations, manufacturer’s specifications, and good engineering and maintenance practices for the control equipment and the unit so as to minimize emissions to the greatest extent practicable.
- (4) Pursuant to the consent decree, a “malfunction” means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(5) On and after December 31, 2012, install, calibrate, operate, and maintain PM CEMS on Mitchell Unit 2, and maintain in an electronic database the hourly average emission values in lbs/mmBtu. The permittee shall use reasonable efforts to keep the PM CEMS running and producing data whenever Unit 2 is operating. Data from the PM CEMS shall be used, at a minimum, to monitor progress in reducing PM emissions, but stack testing according to reference methods approved by the Administrator shall be used to determine compliance with any PM emission rate applicable to Unit 2.

[45CSR§30-12.7] (Unit 1, Unit 2)

4.2. Monitoring Requirements

- 4.2.1. Compliance with the visible emission requirements for emission points *1E* and *2E* shall be determined as outlined in section I.A.2. of the DAQ approved “45CSR2 Monitoring Plan” attached in Appendix A of this permit.
[45CSR§§2-3.2., 8.1.a & 8.2., 45CSR§2A-6]
- 4.2.2. The owner or operator shall install, calibrate, certify, operate, and maintain continuous monitoring systems that measure opacity and all SO₂, and NO_x, emissions from emission points *1E* and *2E* as specified in 40 C.F.R. Part 75 and measure CO₂ emissions from emission points *1E* and *2E* as specified in 40 C.F.R. Part 75. Refer to permit condition 4.1.7.b. for the 40 C.F.R. 63 Subpart UUUUU SO₂ alternate limit for acid gases, and corresponding monitoring requirements in conditions 4.2.18. through 4.2.21.
[45CSR33; 40 C.F.R. §75.10; 40 C.F.R. §§ 64.3(b)(1) and 64.3(b)(4)(ii); 45CSR§30-5.1.c.]
- 4.2.3. Compliance with the operating and fuel usage requirements for Units 1 & 2 shall be demonstrated as outlined in section I.A.3. of the DAQ approved “45CSR2 Monitoring Plan” attached in Appendix A of this permit.
[45CSR§§2-8.3.c., 8.4.a. & 8.4.a.1.]
- 4.2.4. Compliance with the visible emission requirements for *Aux MLI* shall be determined as outlined in section I.B.2. of the DAQ approved “45CSR2 Monitoring Plan” attached in Appendix A of this permit.
[45CSR§§2-3.2. & 8.2.]
- 4.2.5. Compliance with the auxiliary boiler stack (*Aux MLI*) particulate matter mass emission requirements and the operating and fuel usage requirements for the auxiliary boiler, shall be demonstrated as outlined in section I.B.3. of the DAQ approved “45CSR2 Monitoring Plan” attached in Appendix A of this permit.
[45CSR§§2-8.3.c., 8.4.a. & 8.4.a.1.]
- 4.2.6. The owner or operator shall implement a Compliance Assurance Monitoring (CAM) program in accordance with the following:
- The permittee shall monitor and maintain 6-minute opacity averages measured by a continuous opacity monitoring system, operated and maintained pursuant to 40 C.F.R. Part 75, including the minimum data requirements, in order to determine 3-hour block average opacity values. The permittee may also use COMS that satisfy Section 51.214 and appendix P of Part 51, or Section 60.13 and appendix B of Part 60, to satisfy the general design criteria under 40 C.F.R. §§64.3(a) and (b).
[45CSR§30-5.1.c. and 40 C.F.R. § 64.6(c)(1)(i) and (ii)] (Unit 1 and Unit 2)
 - The COM QA/QC procedures shall be equivalent to the applicable requirements of 40 C.F.R. Part 75. The permittee may also use COMS that satisfy Section 51.214 and appendix P of Part 51, or Section 60.13 and appendix B of Part 60, to satisfy the general design criteria under 40 C.F.R. §§64.3(a) and (b).
[40 C.F.R. §75.21 and 40 C.F.R. § 64.6(c)(iii)] (Unit 1 and Unit 2)

- (c) The 6-minute opacity averages from permit condition 4.2.6.(a) shall be used to calculate 3-hour block average opacity values. Data recorded during monitoring malfunctions, associated repairs and QA/QC activities shall not be used for calculating the 3-hour averages. All other available qualified data consisting of 6-minute opacity averages will be used to calculate a 3-hour average. Data availability shall be at least of 50% of the operating time in the 3-hour block to satisfy the data requirements to calculate the 3-hour average opacity. However, the number of invalid 3-hour blocks shall not exceed 15% of the total 3-hour blocks during unit operation for a quarterly reporting period.

An excursion of the indicator range shall be defined as two consecutive 3-hour block average opacity values that exceed 10%.

[45CSR§30-5.1.c.; 40 C.F.R. §§ 64.6(c)(2) and (4) and 40 C.F.R. § 64.7(c)] (Unit 1 and Unit 2)

- 4.2.7. **Proper Maintenance** – At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 C.F.R. § 64.7(b); 45CSR§30-5.1.c.] (Unit 1 and Unit 2)

- 4.2.8. **Response to Excursions or Exceedances**

- (a) Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable
- (b) Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 C.F.R. § 64.7(d); 45CSR§30-5.1.c.] (Unit 1 and Unit 2)

- 4.2.9. **Documentation of Need for Improved Monitoring** – After approval of monitoring under 40 C.F.R. Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 C.F.R. § 64.7(e); 45CSR§30-5.1.c.] (Unit 1 and Unit 2)

4.2.10. **Quality Improvement Plan (QIP)**

- (1) Based on the results of a determination made under permit condition 4.2.8.(b) or 4.2.10.(2), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 C.F.R. §§ 64.8(b) through (e). Refer to permit condition 4.5.6.(b)(iii) for the reporting required when a QIP is implemented.
- (2) If five (5) percent or greater of the three (3) hour average COMS opacity values, determined in accordance with 4.2.6.(c) of this permit, indicate excursions of the 10% opacity threshold during a calendar quarter, the permittee shall develop and implement a QIP. The Director may waive this QIP requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to permit condition 3.2.1.

[40 C.F.R. §§ 64.8, and 64.7(d); 45CSR§30-5.1.c.] (*Unit 1 and Unit 2*)

- 4.2.11. **Continued Operation** – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 C.F.R. Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 C.F.R. § 64.7(c); 45CSR§30-5.1.c.] (*Unit 1 and Unit 2*)

- 4.2.12. The permittee shall perform daily monitoring and recordkeeping of the total daily dry sorbent usage rate (pounds /tons per day) and startups, shutdowns, malfunctions, and maintenance associated with the dry sorbent injection system.

[45CSR§30-5.1.c., **State-enforceable only**]

- 4.2.13. In order to determine compliance with condition 4.1.9.d of this permit, the permittee shall monitor and record the amount of fuel oil combusted by Boiler Aux-1 on a monthly basis. Compliance with fuel usage limitations in item d will constitute compliance with the emission limitations of item a. of Condition 4.1.9. Such records shall be maintained in accordance with condition 3.4.2.

[45CSR13, R13-2608, 5.2.1.; 40 C.F.R. §60.49b(d)(2); 45CSR16; 45CSR§2-8.3.c.; 45CSR§§10-8.2.c.3. and 8.3.c.]

- 4.2.14. The permittee shall obtain records indicating the fuel oil received at the facility for Boiler Aux 1 meets the specification of distillate oil as defined in 40 C.F.R. §60.41b and sulfur content stated in item d. of condition 4.1.9. from the fuel supplier. Such records shall be maintained in accordance with condition 3.4.2.

[45CSR13, R13-2608, 5.2.2.; 40 C.F.R. §60.49b(r)(1); 45CSR16; 45CSR§10-8.2.c.3.]

- 4.2.15. The permittee shall conduct subsequent visible emission observations of the emission point for Boiler Aux-1 at least once every 12 months from the date of the most recent observation. Such observations shall be conducted using Method 9 of Appendix A-4 of Part 60. If visible emissions are observed, the permittee must follow the subsequent observation schedule in 40 C.F.R. §60.48b(a)(1)(ii) through (iv) as applicable. Records of Method 9 observations shall contain the following:
- Dates and time intervals of all opacity observation periods;
 - Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - Copies of all visible emission observer opacity field data sheets;

If the most recent observation is less than 10 percent opacity, the permittee may use Method 22 of Appendix A-7 of Part 60 to demonstrate compliance in lieu of using Method 9. The use of Method 22 observations must be in accordance with the length of observation and frequency as outlined in 40 C.F.R. §60.48b(a)(2)(i) through (ii) as applicable. Records of Method 22 observations shall contain the following:

- Dates and time intervals of all visible emissions observation periods;
- Name and affiliation for each visible emission observer participating in the performance test;
- Copies of all visible emission observer opacity field data sheets; and
- Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

Records of observations shall be maintained in accordance with condition 3.4.2.

[45CSR13, R13-2608, 5.2.3.; 40 C.F.R. §§60.48b(a) and 60.49b(f); 45CSR16; 45CSR§2-8.1.a.]

- 4.2.16. If you elect to (or are required to) use CEMS to continuously monitor Hg, HCl, HF, SO₂, or PM emissions (or, if applicable, sorbent trap monitoring systems to continuously collect Hg emissions data), the default values in §63.10007(f) are available for use in the emission rate calculations during startup periods or shutdown periods (as defined in §63.10042). For the purposes of 40 C.F.R. 63 Subpart UUUUU, these default values are not considered to be substitute data. [40 C.F.R. §63.10007(f); 45CSR34] (SO₂ CEMS; Hg sorbent trap monitoring system; Unit 1 and Unit 2)
- 4.2.17. Single unit-single stack configurations. For an affected unit that exhausts to the atmosphere through a single, dedicated stack, you shall either install the required CEMS, PM CPMS, and sorbent trap monitoring systems 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.

If you use an oxygen (O₂) or carbon dioxide (CO₂) CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the O₂ or CO₂ concentrations shall be monitored at a location that represents emissions to the atmosphere, i.e., at the outlet of the EGU, downstream of all emission control devices. You must install, certify, maintain, and operate the CEMS according to part 75 of this chapter. Use only quality-assured O₂ or CO₂ data in the emissions calculations; do not use part 75 substitute data values.

If you are required to use a stack gas flow rate monitor, either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 1 or 2 to this subpart, you must install, certify, operate, and maintain the monitoring system and conduct on-going quality-assurance testing of the system according to part 75 of this chapter. Use only unadjusted, quality-assured flow rate data in the emissions calculations. Do not apply bias adjustment factors to the flow rate data and do not use substitute flow rate data in the calculations.

SO₂ CEMS Requirements for 40 C.F.R. 63 Subpart UUUUU.

- (1) If you use an SO₂ CEMS, you must install the monitor at the outlet of the EGU, downstream of all emission control devices, and you must certify, operate, and maintain the CEMS according to part 75 of this chapter.
- (2) For on-going QA, the SO₂ CEMS must meet the applicable daily, quarterly, and semiannual or annual requirements in sections 2.1 through 2.3 of appendix B to part 75 of this chapter, with the following addition: You must perform the linearity checks required in section 2.2 of appendix B to part 75 of this chapter if the SO₂ CEMS has a span value of 30 ppm or less.
- (3) Calculate and record a 30-boiler operating day rolling average SO₂ emission rate in the units of the standard, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate is the average of all of the valid hourly SO₂ emission rates in the 30 boiler operating day period.
- (4) Use only unadjusted, quality-assured SO₂ concentration values in the emissions calculations; do not apply bias adjustment factors to the part 75 SO₂ data and do not use part 75 substitute data values. For startup or shutdown hours (as defined in §63.10042) the default gross output and the diluent cap are available for use in the hourly SO₂ emission rate calculations, as described in §63.10007(f). Use a flag to identify each startup or shutdown hour and report a special code if the diluent cap or default gross output is used to calculate the SO₂ emission rate for any of these hours.

If you use a Hg CEMS or a sorbent trap monitoring system, you must install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with appendix A to this subpart. You must calculate and record a 30- (or, if alternate emissions averaging is used, 90-) boiler operating day rolling average Hg emission rate, in units of the standard, updated after each new boiler operating day. Each 30- (or, if alternate emissions averaging is used, 90-) boiler operating day rolling average emission rate, calculated according to section 6.2 of appendix A to the subpart, is the average of all of the valid hourly Hg emission rates in the preceding 30- (or, if alternate emissions averaging is used, a 90-) boiler operating days. Section 7.1.4.3 of appendix A to this subpart explains how to reduce sorbent trap monitoring system data to an hourly basis.

[40 C.F.R. §§63.10010(a)(1), (b), (c), (f), and (g); 40 C.F.R. §63.10021(a), Table 7, Item #1; 45CSR34] (Unit 1 and Unit 2)

- 4.2.18. You 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 §63.8(c)(7) of this part), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. You are required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

[40 C.F.R. §§63.10020(b) and (a); 45CSR34] (Unit 1 and Unit 2 – SO₂ CEMS and Hg Sorbent Trap Monitoring System)

- 4.2.19. You may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). 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. You must use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system.

[40 C.F.R. §§63.10020(c) and (a); 45CSR34] (Unit 1 and Unit 2 – SO₂ CEMS and Hg Sorbent Trap Monitoring System)

- 4.2.20. 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 requirements.
[40 C.F.R. §§63.10020(d) and (a); 45CSR34] (Unit 1 and Unit 2 – SO₂ CEMS and Hg Sorbent Trap Monitoring System)
- 4.2.21. Except as otherwise provided in §63.10020(c), if you use a CEMS to measure SO₂, PM, HCl, HF, or Hg emissions, or using a sorbent trap monitoring system to measure Hg emissions, you must demonstrate continuous compliance 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, CO₂, O₂, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day (or, if alternate emissions averaging is used for Hg, 90-boiler operating day) rolling average basis, updated at the end of each new boiler operating day. Use Equation 8 in §63.10021(b) to determine the 30- (or, if applicable, 90-) boiler operating day rolling average.
[40 C.F.R. §63.10021(b); 45CSR34] (Unit 1 and Unit 2 – SO₂ CEMS and Hg Sorbent Trap Monitoring System)

4.3. Testing Requirements

- 4.3.1. The owner or operator shall conduct, or have conducted, tests to determine the compliance of Unit 1 & Unit 2 with the particulate matter mass emission limitations. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR2 Appendix - Compliance Test Procedures for 45CSR2 or other equivalent EPA approved method approved by the Secretary. Such tests shall be conducted in accordance with the schedule set forth in the following table. The next testing shall be performed no later than March 20, 2016.

Test	Test Results	Retesting Frequency
Annual	after three successive tests indicate mass emission rates $\leq 50\%$ of weight emission standard	Once/3 years ¹
Annual	after two successive tests indicate mass emission rates $< 80\%$ of weight emission standard	Once/2 years ²
Annual	any tests indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual ³
Once/2 years	after two successive tests indicate mass emission rates $\leq 50\%$ of weight emission standard	Once/3 years
Once/2 years	any tests indicates a mass emission rate $< 80\%$ of weight emission standard	Once/2 years
Once/2 years	any tests indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual
Once/3 years	any tests indicates a mass emission rate $\leq 50\%$ of weight emission standard	Once/3 years
Once/3 years	any test indicates mass emission rates between 50% and 80 % of weight emission standard	Once/2 years

Test	Test Results	Retesting Frequency
Once/3 years	any test indicates a mass emission rate \geq 80% of weight emission standard	Annual

¹ Once/3 years is Cycle '3' and means that testing shall be performed within thirty-six (36) months from the date of the previous test, but no earlier than eighteen (18) months from the date of the previous test (see 45CSR§2A-2.6.c.).

² Once/2 years is Cycle '2' and means that testing shall be performed within twenty-four (24) months from the date of the previous test, but no earlier than twelve (12) months from the date of the previous test (see 45CSR§2A-2.6.b.).

³ Annual is Cycle '1' and means that testing shall be performed within twelve (12) months from the date of the previous test, but no earlier than six (6) months from the date of the previous test (see 45CSR§2A-2.6.a.).

[45CSR§2-8.1., 45CSR§2A-5.2.]

- 4.3.2. Data collected during future periodic 45CSR2 mass emissions tests (under permit condition 4.3.1.) will be used to supplement the existing data set in order to verify the continuing appropriateness of the 10% indicator range value.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6(b)] (Unit 1 and Unit 2)

- 4.3.3. Low emitting EGUs. The provisions of this paragraph (h) apply to pollutants with emissions limits from new EGUs except Hg and to all pollutants with emissions limits from existing EGUs. You may pursue this compliance option unless prohibited pursuant to §63.10000(c)(1)(i).

(1) An EGU may qualify for low emitting EGU (LEE) status for Hg, HCl, HF, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals (or total HAP metals or individual HAP metals, for liquid oil-fired EGUs) if you collect performance test data that meet the requirements of this paragraph (h), and if those data demonstrate:

(i) For all pollutants except Hg, performance test emissions results less than 50 percent of the applicable emissions limits in Table 1 or 2 to this subpart for all required testing for 3 consecutive years; or

(ii) For Hg emissions from an existing EGU, either:

(A) Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to this subpart (expressed either in units of lb/TBtu or lb/GWh); or

(B) Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to this subpart (expressed either in units of lb/TBtu or lb/GWh).

(2) For all pollutants except Hg, you must conduct all required performance tests described in §63.10007 to demonstrate that a unit qualifies for LEE status.

(i) When conducting emissions testing to demonstrate LEE status, you must increase the minimum sample volume specified in Table 1 or 2 nominally by a factor of two.

(ii) Follow the instructions in §63.10007(e) and Table 5 to this subpart to convert the test data to the units of the applicable standard.

(3) For Hg, you must conduct a 30- (or 90-) boiler operating day performance test using Method 30B in appendix A-8 to part 60 of this chapter to determine whether a unit qualifies for LEE status. Locate the Method 30B sampling probe tip at a point within 10 percent of the duct area centered about the duct's centroid at a location that meets Method 1 in appendix A-1 to part 60 of this chapter and conduct at least three nominally equal length test runs over the 30- (or 90-) boiler operating day test period. You may use a pair of sorbent traps to sample the stack gas for a period consistent with that given in section 5.2.1 of appendix A to this subpart. Collect Hg emissions data continuously over the entire test period (except when changing sorbent traps or performing required reference method QA procedures). As an alternative to constant rate sampling per Method 30B, you may use proportional sampling per section 8.2.2 of Performance Specification 12 B in appendix B to part 60 of this chapter.

(i) Depending on whether you intend to assess LEE status for Hg in terms of the lb/TBtu or lb/GWh emission limit in Table 2 to this subpart or in terms of the annual Hg mass emissions limit of 29.0 lb/year, you will have to collect some or all of the following data during the 30-boiler operating day test period (see paragraph (h)(3)(iii) of this section):

(A) Diluent gas (CO₂ or O₂) data, using either Method 3A in appendix A-3 to part 60 of this chapter or a diluent gas monitor that has been certified according to part 75 of this chapter.

(B) Stack gas flow rate data, using either Method 2, 2F, or 2G in appendices A-1 and A-2 to part 60 of this chapter, or a flow rate monitor that has been certified according to part 75 of this chapter.

(C) Stack gas moisture content data, using either Method 4 in appendix A-1 to part 60 of this chapter, or a moisture monitoring system that has been certified according to part 75 of this chapter. Alternatively, an appropriate fuel-specific default moisture value from §75.11(b) of this chapter may be used in the calculations or you may petition the Administrator under §75.66 of this chapter for use of a default moisture value for non-coal-fired units.

(D) Hourly gross output data (megawatts), from facility records.

(ii) If you use CEMS to measure CO₂ (or O₂) concentration, and/or flow rate, and/or moisture, record hourly average values of each parameter throughout the 30-boiler operating day test period. If you opt to use EPA reference methods rather than CEMS for any parameter, you must perform at least one representative test run on each operating day of the test period, using the applicable reference method.

(iii) Calculate the average Hg concentration, in µg/m³ (dry basis), for the 30- (or 90-) boiler operating day performance test, as the arithmetic average of all Method 30B sorbent trap results. Also calculate, as applicable, the average values of CO₂ or O₂ concentration, stack gas flow rate, stack gas moisture content, and gross output for the test period. Then:

(A) To express the test results in units of lb/TBtu, follow the procedures in §63.10007(e). Use the average Hg concentration and diluent gas values in the calculations.

(B) To express the test results in units of lb/GWh, use Equations A-3 and A-4 in section 6.2.2 of appendix A to this subpart, replacing the hourly values "C_h", "Q_h", "B_{ws}" and "(MW)_h" with the average values of these parameters from the performance test.

(C) To calculate pounds of Hg per year, use one of the following methods:

- (1) Multiply the average lb/TBtu Hg emission rate (determined according to paragraph (h)(3)(iii)(A) of this section) by the maximum potential annual heat input to the unit (TBtu), which is equal to the maximum rated unit heat input (TBtu/hr) times 8,760 hours. If the maximum rated heat input value is expressed in units of MMBtu/hr, multiply it by 10^{-6} to convert it to TBtu/hr; or
- (2) Multiply the average lb/GWh Hg emission rate (determined according to paragraph (h)(3)(iii)(B) of this section) by the maximum potential annual electricity generation (GWh), which is equal to the maximum rated electrical output of the unit (GW) times 8,760 hours. If the maximum rated electrical output value is expressed in units of MW, multiply it by 10^{-3} to convert it to GW; or
- (3) If an EGU has a federally-enforceable permit limit on either the annual heat input or the number of annual operating hours, you may modify the calculations in paragraph (h)(3)(iii)(C)(1) of this section by replacing the maximum potential annual heat input or 8,760 unit operating hours with the permit limit on annual heat input or operating hours (as applicable).
- (4) For a group of affected units that vent to a common stack, you may either assess LEE status for the units individually by performing a separate emission test of each unit in the duct leading from the unit to the common stack, or you may perform a single emission test in the common stack. If you choose the common stack testing option, the units in the configuration qualify for LEE status if:
 - (i) The emission rate measured at the common stack is less than 50 percent (10 percent for Hg) of the applicable emission limit in Table 1 or 2 to this subpart; or
 - (ii) For Hg from an existing EGU, the applicable Hg emission limit in Table 2 to this subpart is met and the potential annual mass emissions, calculated according to paragraph (h)(3)(iii) of this section (with some modifications), are less than or equal to 29.0 pounds times the number of units sharing the common stack. Base your calculations on the combined heat input capacity of all units sharing the stack (i.e., either the combined maximum rated value or, if applicable, a lower combined value restricted by permit conditions or operating hours).
- (5) For an affected unit with a multiple stack or duct configuration in which the exhaust stacks or ducts are downstream of all emission control devices, you must perform a separate emission test in each stack or duct. The unit qualifies for LEE status if:
 - (i) The emission rate, based on all test runs performed at all of the stacks or ducts, is less than 50 percent (10 percent for Hg) of the applicable emission limit in Table 1 or 2 to this subpart; or
 - (ii) For Hg from an existing EGU, the applicable Hg emission limit in Table 2 to this subpart is met and the potential annual mass emissions, calculated according to paragraph (h)(3)(iii) of this section, are less than or equal to 29.0 pounds. Use the average Hg emission rate from paragraph (h)(5)(i) of this section in your calculations.

[40 C.F.R. §63.10005(h); 45CSR34] (Unit 1 and Unit 2)

4.3.4. For affected units meeting the LEE requirements of §63.10005(h), you must repeat the performance test once every 3 years (once every year for Hg) according to Table 5 and §63.10007. Should subsequent emissions testing results show the unit does not meet the LEE eligibility requirements, LEE status is lost. If this should occur:

- (1) For all pollutant emission limits except for Hg, you must conduct emissions testing quarterly, except as otherwise provided in §63.10021(d)(1).

[40 C.F.R. §63.10006(b); 45CSR34] (Unit 1 and Unit 2)

4.3.5. Time between performance tests.

- (1) Notwithstanding the provisions of §63.10021(d)(1), the requirements listed in paragraphs (g) and (h) of this section, and the requirements of paragraph (f)(3) of this section, you must complete performance tests for your EGU as follows.

(i) At least 45 calendar days, measured from the test's end date, must separate performance tests conducted every quarter;

(ii) For annual testing:

(A) At least 320 calendar days, measured from the test's end date, must separate performance tests,

(B) At least 320 calendar days, measured from the test's end date, must separate annual sorbent trap mercury testing for 30-boiler operating day LEE tests,

(C) At least 230 calendar days, measured from the test's end date, must separate annual sorbent trap mercury testing for 90-boiler operating day LEE tests; and

(iii) At least 1,050 calendar days, measured from the test's end date, must separate performance tests conducted every 3 years.

- (2) For units demonstrating compliance through quarterly emission testing, you must conduct a performance test in the 4th quarter of a calendar year if your EGU has skipped performance tests in the 3 quarters of the calendar year.

- (3) If your EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, you must complete an additional performance test in that period as follows:

(i) At least 15 calendar days must separate two performance tests conducted in the same quarter.

(ii) At least 107 calendar days must separate two performance tests conducted in the same calendar year.

(iii) At least 350 calendar days must separate two performance tests conducted in the same 3 year period.

[40 C.F.R. §63.10006(f); 45CSR34] (Unit 1 and Unit 2)

4.3.6. If a performance test on a non-mercury LEE shows emissions in excess of 50 percent of the emission limit and if you choose to reapply for LEE status, you must conduct performance tests at the appropriate frequency given in §63.10006(b) for that pollutant until all performance tests over a consecutive 3-year period show compliance with the LEE criteria.

[40 C.F.R. §63.10006(h); 45CSR34] (Unit 1 and Unit 2)

4.3.7. Except as otherwise provided in 40 C.F.R. §63.10007, you must conduct all required performance tests according to 40 C.F.R. §§63.7(d), (e), (f), and (h). You must also develop a site-specific test plan according to the requirements in 40 C.F.R. §63.7(c).

[40 C.F.R. §63.10007(a); 45CSR34] (Unit 1 and Unit 2)

4.3.8. If you use SO₂ CEMS to determine compliance with a 30-boiler operating day rolling average emission limit, you must collect quality-assured CEMS data for all unit operating conditions, including startup and shutdown (see §63.10011(g) and Table 3 to this subpart), except as otherwise provided in §63.10020(b). Emission rates determined during startup periods and shutdown periods (as defined in §63.10042) are not to be included in the compliance determinations, except as otherwise provided in §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii).

[40 C.F.R. §63.10007(a)(1); 45CSR34] (Unit 1 and Unit 2)

4.3.9. If you conduct performance testing with test methods in lieu of continuous monitoring, operate the unit at maximum normal operating load conditions during each periodic (e.g., quarterly) performance test. 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.

[40 C.F.R. §63.10007(a)(2); 45CSR34] (Particulate Matter; Unit 1 and Unit 2)

4.3.10. You must conduct each performance test (including traditional 3-run stack tests, 30-boiler operating day tests based on CEMS data (or sorbent trap monitoring system data), and 30-boiler operating day Hg emission tests for LEE qualification) according to the requirements in Table 5 to 40 C.F.R. 63 Subpart UUUUU.

[40 C.F.R. §63.10007(b); 45CSR34] (Unit 1 and Unit 2)

4.3.11. Except for a 30-boiler operating day performance test based on CEMS (or sorbent trap monitoring system) data, where the concept of test runs does not apply, you must conduct a minimum of three separate test runs for each performance test, as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling time or volume specified in Table 2 to this subpart. Sections 63.10005(d) and (h), respectively, provide special instructions for conducting performance tests based on CEMS or sorbent trap monitoring systems, and for conducting emission tests for LEE qualification.

[40 C.F.R. §63.10007(d); 45CSR34] (Particulate Matter; Unit 1 and Unit 2)

4.3.12. To use the results of performance testing to determine compliance with the applicable emission limits in Table 2 to 40 C.F.R. 63 Subpart UUUUU, proceed as in 40 C.F.R. §§63.10007(e)(1) through (3). If you use quarterly performance testing for coal-fired EGUs to measure compliance with PM emissions limit in Table 2 to Subpart UUUUU, you demonstrate continuous compliance by calculating the results of the testing in units of the applicable emissions standard.

[40 C.F.R. §63.10007(e); 40 C.F.R. §63.10021(a), Table 7, Item #4; 45CSR34] (Unit 1 and Unit 2)

- 4.3.13. Upon request, you shall make available to the EPA Administrator such records as may be necessary to determine whether the performance tests have been done according to the requirements of §63.10007. [40 C.F.R. §63.10007(g); 45CSR34] (Unit 1 and Unit 2)
- 4.3.14. For candidate LEE units, use the results of the performance testing described in §63.10005(h) to determine initial compliance with the applicable emission limit(s) in Table 2 to this subpart and to determine whether the unit qualifies for LEE status. [40 C.F.R. §63.10011(d); 45CSR34] (Unit 1 and Unit 2)
- 4.3.15. If you use quarterly performance testing to demonstrate compliance with one or more applicable emissions limits in Table 2 to 40 C.F.R. 63 Subpart UUUUU, you
- (1) May skip performance testing 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; and
 - (2) Must conduct the performance test as defined in Table 5 to 40 C.F.R. 63 Subpart UUUUU and calculate the results of the testing in units of the applicable emissions standard.
- [40 C.F.R. §§63.10021(d), (d)(1), and (d)(2); 45CSR34] (Unit 1 and Unit 2)
- 4.3.16. Notification of performance test. When you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. Compliance with this requirement ensures compliance with 40 C.F.R. §§63.7(b) and 63.9(e). [40 C.F.R. §63.10030(d) and (a); 40 C.F.R. §§63.7(b) and 63.9(e); 45CSR34] (Unit 1 and Unit 2)
- 4.3.17. If your coal-fired EGU does not qualify as a LEE for filterable particulate matter (PM), you must demonstrate compliance through an initial performance test and you must monitor continuous performance through either use of a particulate matter continuous parametric monitoring system (PM CPMS), a PM CEMS, or, for an existing EGU, compliance performance testing repeated quarterly. [40 C.F.R. §63.10000(c)(1)(iv); 45CSR34] (Unit 1 and Unit 2)

4.4. Recordkeeping Requirements

- 4.4.1. Records of monitored data established in the monitoring plan (see Appendix A) shall be maintained on site and shall be made available to the Secretary or his duly authorized representative upon request.
[45CSR§2-8.3.a.]
- 4.4.2. Records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit, shall be maintained on-site in a manner to be established by the Secretary and made available to the Secretary or his duly authorized representative upon request.
[45CSR§2-8.3.c.]
- 4.4.3. Records of the block 3-hour COMS opacity averages and corrective actions taken during excursions of the CAM plan indicator range shall be maintained on site and shall be made available to the Director or his duly authorized representative upon request. COMS performance data will be maintained in accordance with 40 C.F.R. Part 75 recordkeeping requirements.
[45CSR§30-5.1.c. and 40 C.F.R. §64.9(b)] (Unit 1 and Unit 2)

- 4.4.4. **General recordkeeping requirements for 40 C.F.R. Part 64 (CAM).** The permittee shall comply with the recordkeeping requirements specified in permit conditions 3.3.1. and 3.3.2. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 (condition 4.2.10.) and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

[40 C.F.R. § 64.9(b); 45CSR§30-5.1.c.] (Unit 1 and Unit 2)

- 4.4.5. You must keep records according to paragraphs (1) and (2) of this condition.

- (1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual* compliance report that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

** Note – Compliance reports are required only once every 5 years for the limited use boiler Aux 1 pursuant to 40 C.F.R. §63.7550(b) in permit condition 4.5.9.*

- (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).

[40 C.F.R. §63.7555(a); 45CSR34] (Aux 1) This requirement is subject to the compliance date in condition 4.1.13.

- 4.4.6. You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.
[40 C.F.R. §63.7555(i); 45CSR34] (Aux 1) This requirement is subject to the compliance date in condition 4.1.13.

- 4.4.7. You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.
[40 C.F.R. §63.7555(j); 45CSR34] (Aux 1) This requirement is subject to the compliance date in condition 4.1.13.

- 4.4.8. **Format and Retention of Records for 40 C.F.R. 63 Subparts DDDDD and UUUUU**

- (a) Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).
- (b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[40 C.F.R. §§63.7560(a), (b), and (c); 45CSR34] (Aux 1) This requirement is subject to the compliance date in condition 4.1.13.

[40 C.F.R. §§63.10033(a), (b), and (c); 45CSR34] (Unit 1 and Unit 2)

4.4.9. For each unit that meets the definition of limited-use boiler or process heater, you must keep fuel use records for the days the boiler or process heater was operating.
[40 C.F.R. §63.7525(k); 45CSR34] (Aux 1) This requirement is subject to the compliance date in condition 4.1.13.

4.4.10. You must keep records according to paragraphs (1) and (2) of this condition. If you are required to (or elect to) continuously monitor Hg and/or HCl and/or HF emissions, you must also keep the records required under appendix A and/or appendix B to 40 C.F.R. 63 Subpart UUUUU.

- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).
- (2) Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in §63.10(b)(2)(viii).

[40 C.F.R. §63.10032(a); 45CSR34] (Unit 1 and Unit 2)

4.4.11. For each CEMS, you must keep records according to paragraphs (1) through (4) of this condition.

- (1) Records described in §63.10(b)(2)(vi) through (xi).
- (2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- (3) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).
- (4) 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.

[40 C.F.R. §63.10032(b); 45CSR34] (Unit 1 and Unit 2)

4.4.12. You must keep the records required in Table 7 to 40 C.F.R. 63 Subpart UUUUU to show continuous compliance with each emission limit and operating limit that applies to you (conditions 4.1.6.b., 4.1.7.b., 4.1.16., and 4.1.17.).

[40 C.F.R. §63.10032(c), Table 7, Items #1, #4, #5, #6, #7; 45CSR34] (Unit 1 and Unit 2)

4.4.13. For each EGU subject to an emission limit, you must also keep the records in paragraphs (1) through (3) of this condition.

- (1) You must keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used.
- (2) If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), you must keep a record which documents how the secondary material meets each of the legitimacy criteria. If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(2), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), you must keep a record which documents how the fuel satisfies the requirements of the petition process.

- (3) For an EGU that qualifies as an LEE under §63.10005(h), you must keep annual records that document that your emissions 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.

[40 C.F.R. §63.10032(d); 45CSR34] (Unit 1 and Unit 2)

4.4.14. Regarding startup periods or shutdown periods:

- (1) Should you choose to rely on paragraph (1) of the definition of “startup” in §63.10042 for your EGU, you must keep records of the occurrence and duration of each startup or shutdown.

[40 C.F.R. §§63.10032(f) and (f)(1); 45CSR34] (Unit 1 and Unit 2)

4.4.15. You must keep records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment.

[40 C.F.R. §63.10032(g); 45CSR34] (Unit 1 and Unit 2)

4.4.16. You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b) (permit condition 4.1.18.), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 C.F.R. §63.10032(h); 45CSR34] (Unit 1 and Unit 2)

4.4.17. You must keep records of the type(s) and amount(s) of fuel used during each startup or shutdown.

[40 C.F.R. §63.10032(i); 45CSR34] (Unit 1 and Unit 2)

4.5. Reporting Requirements

- 4.5.1. The designated representative shall electronically report SO₂, NO_x, and CO₂ emissions data and information as specified in 40 C.F.R. § 75.64 to the Administrator of USEPA, quarterly. Each electronic report must be submitted within thirty (30) days following the end of each calendar quarter.

[45CSR33; 40 C.F.R. §75.64]

- 4.5.2. A periodic exception report shall be submitted to the Secretary, in a manner and at a frequency to be established by the Secretary. Compliance with this periodic exception reporting requirement shall be demonstrated as outlined in sections I.A.4., I.B.4., and II.A.4. of the DAQ approved “45CSR2 and 45CSR10 Monitoring Plan” attached in Appendix A of this permit.

[45CSR§2-8.3.b.]

- 4.5.3. Excess opacity periods resulting from any malfunction of Unit 1, Unit 2, or Aux 1 or their air pollution control equipment, meeting the following conditions, may be reported on a quarterly basis unless otherwise required by the Secretary:

- a. The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period; and

- b. Excess opacity does not exceed forty percent (40%).

[45CSR§2-9.3.a.]

4.5.4. Except as provided in permit condition 4.5.3. above, the owner or operator shall report to the Secretary by telephone, telefax, or e-mail any malfunction of Unit 1, Unit 2, or Aux1 or their associated air pollution control equipment, which results in any excess particulate matter or excess opacity, by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Secretary within thirty (30) days providing the following information:

- a. A detailed explanation of the factors involved or causes of the malfunction;
- b. The date, and time of duration (with starting and ending times) of the period of excess emissions;
- c. An estimate of the mass of excess emissions discharged during the malfunction period;
- d. The maximum opacity measured or observed during the malfunction;
- e. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
- f. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.b.]

4.5.5. Unit 1 & Unit 2 are Phase II Acid Rain affected units under 45CSR33, as defined by 40 C.F.R § 72.6, and as such are required to meet the requirements of 40 C.F.R. Parts 72, 73, 74, 75, 76, 77 and 78. These requirements include, but are not limited to:

- a. Hold an Acid Rain permit;
- b. Hold allowances, as of the allowance transfer deadline, in the unit's compliance sub-account of not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit;
- c. Comply with the applicable Acid Rain emissions for sulfur dioxide;
- d. Comply with the applicable Acid Rain emissions for nitrogen oxides;
- e. Comply with the monitoring requirements of 40 C.F.R. Part 75 and section 407 of the Clean Air Act of 1990 and regulations implementing section 407 of the Act;
- f. Submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 C.F.R. Part 72, Subpart I and 40 C.F.R. Part 75.

[45CSR33; 40 C.F.R. Parts 72, 73, 74, 75, 76, 77, 78]

4.5.6. **General reporting requirements for 40 C.F.R. Part 64 (CAM)**

- (a) On and after the date specified in 40 C.F.R. §64.7(a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. 64, the permittee shall submit monitoring reports to the DAQ in accordance with permit condition 3.4.6.
- (b) A report for monitoring under 40 C.F.R. 64 shall include, at a minimum, the information required under permit condition 3.4.8. and the following information, as applicable:
 - (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9(a); 45CSR§30-5.1.c.] (Unit 1 and Unit 2)

4.5.7. **Notification of Compliance Status for 40 C.F.R. 63 Subpart DDDDD.** You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 C.F.R. §63.7545(e).

- (1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under § 241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of § 241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.
- (7) If you had a deviation from the work practice standard (condition 4.1.14.), you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.
- (8) In addition to the information required in 40 C.F.R. §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - (i) “This facility complies with the required initial tune-up according to the procedures in 40 C.F.R. §63.7540(a)(10)(i) through (vi).” (condition 4.1.14.(i) through (vi)).
 - (iii) “No secondary materials that are solid waste were combusted in any affected unit.”

The notification must be sent to the Director (and a copy to U.S. EPA) before the close of business on the 60th day following the completion of the initial tune-up (condition 4.1.14.).

[40 C.F.R. §§ 63.7530(f), 63.7545(a), 63.7545(e)(1), (7), (8)(i) and (iii); 40 C.F.R. §§63.9(a)(4)(ii) and 63.9(h)(2)(ii); 45CSR34; 45CSR13, R13-2608, 5.5.1.] (Aux 1) This requirement is subject to the compliance date in condition 4.1.13.

- 4.5.8. You must report each instance in which you did not meet each work practice standard in Table 3 to 40 C.F.R. 63 Subpart DDDDD that applies to you (condition 4.1.14.). These instances are deviations from the work practice standards in 40 C.F.R. 63 Subpart DDDDD. These deviations must be reported according to the requirements in 40 C.F.R. §63.7550 (condition 4.5.9.).
[40 C.F.R. §63.7540(b); 45CSR34] (Aux 1) This requirement is subject to the compliance date in condition 4.1.13.
- 4.5.9. You must submit a Compliance report for 40 C.F.R. 63 Subpart DDDDD containing:
- a. The information in §63.7550(c)(5)(i) through (iv) and (xiv), which is:
 - (i) Company and Facility name and address.
 - (ii) Process unit information, emissions limitations, and operating parameter limitations.
 - (iii) Date of report and beginning and ending dates of the reporting period.
 - (iv) The total operating time during the reporting period.
 - (xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to 40 C.F.R. §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
 - b. If there are no deviations from the requirements for work practice standards in Table 3 to 40 C.F.R. 63 Subpart DDDDD that apply to you (condition 4.1.14.), a statement that there were no deviations from the work practice standards during the reporting period.

You must submit the report every 5 years according to the requirements in 40 C.F.R. §63.7550(b), which are:

- (1) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 C.F.R. §63.7495 (condition 4.1.13.) and ending on July 31 or January 31, whichever date is the first date that occurs at least 5 years after the compliance date that is specified for your source in 40 C.F.R. §63.7495 (condition 4.1.13.).
- (2) The first 5-year compliance report must be postmarked or submitted no later than January 31.
- (3) Each subsequent 5-year compliance report must cover the 5-year periods from January 1 to December 31.
- (4) Each subsequent 5-year compliance report must be postmarked or submitted no later than January 31.
- (5) [You may submit the first and subsequent compliance reports according to the dates established in permit condition 3.5.6. instead of according to the dates in paragraphs b. \(1\) through \(4\) of this condition.](#)

You must submit all reports required by Table 9 of 40 C.F.R. 63 Subpart DDDDD electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 C.F.R. 63 Subpart DDDDD is not available in CEDRI at the time that the report is due the report you must submit the report to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. At the discretion of the Administrator, you must also submit these reports, to the Administrator in the format specified by the Administrator.

[40 C.F.R. §§63.7550(a), Table 9, Items # 1.a. and # 1.b.; 40 C.F.R. §§63.7550(b), and (c)(1); 40 C.F.R. §63.7550(h)(3); 45CSR34; 45CSR13, R13-2608, 5.5.2.] (Aux 1) This requirement is subject to the compliance date in condition 4.1.13.

- 4.5.10. The permittee shall report any observation made in accordance with Condition 4.2.15. that indicate visible emissions in excess of either items e and/or f of condition 4.1.9. made during January 1 to June 30 in the facility's Title V Semi Annual Compliance Report or July 1 to December 31 as part of the facility's Title V Annual Compliance Report. Such report shall include the record of the recorded observation in accordance with condition 4.2.15. and measures taken as result of the observation. This reporting requirement can be satisfied by including the results of the exceeded observation(s) with the facility's quarterly opacity report and list the exceedance in the facility's Title V annual compliance certification report.

[45CSR13, R13-2608, 5.5.3.; 40 C.F.R. §60.49b(h); 45CSR16; 45CSR§2-8.3.b.]

- 4.5.11. You must submit the reports required under §63.10031 and, if applicable, the reports required under appendices A and B to this subpart. The electronic reports required by appendices A and B to this subpart must be sent to the Administrator electronically in a format prescribed by the Administrator, as provided in §63.10031. CEMS data (except for PM CEMS and any approved alternative monitoring using a HAP metals CEMS) shall be submitted using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Other data, including PM CEMS data, HAP metals CEMS data, and CEMS performance test detail reports, shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool, the Compliance and Emissions Data Reporting Interface, or alternate electronic file format, all as provided for under §63.10031.

[40 C.F.R. §63.10021(f); 45CSR34] (Unit 1 and Unit 2)

- 4.5.12. You must report each instance in which you did not meet an applicable emissions limit or operating limit in Tables 2 and 3 to 40 C.F.R. 63 Subpart UUUUU or failed to conduct a required tune-up (permit conditions 4.1.6.b., 4.1.7.b., 4.1.16., and 4.1.17.). These instances are deviations from the requirements of this subpart. These deviations must be reported according to §63.10031.

[40 C.F.R. §63.10021(g); 45CSR34] (Unit 1 and Unit 2)

- 4.5.13. You must submit all of the notifications in 40 C.F.R. §63.7(c), and §63.8(e), by the dates specified.

[40 C.F.R. §63.10030(a); 45CSR34] (Unit 1 and Unit 2)

- 4.5.14. You must submit a Compliance report for 40 C.F.R. 63 Subpart UUUUU containing:

a. Information required in 40 C.F.R. §§63.10031(c)(1) through (4) and (6) through (9):

(1) The information required by the summary report located in 40 C.F.R. §63.10(e)(3)(vi).

- (2) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.
- (3) Indicate whether you burned new types of fuel during the reporting period. If you did burn new types of fuel you must include the date of the performance test where that fuel was in use.
- (4) Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in §§63.10021(e)(6) and (7) (permit conditions 4.1.17.(6) and (7)) were completed.
- (6) You must report emergency bypass information annually from EGUs with LEE status.
- (7) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test, if applicable. If you are conducting stack tests once every 3 years to maintain LEE status, consistent with §63.10006(b), the date of each stack test conducted during the previous 3 years, a comparison of emission level you achieved in each stack test conducted during the previous 3 years to the 50 percent emission limit threshold required in §63.10005(h)(1)(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions.
- (8) A certification.
- (9) If you have a deviation from any emission limit, work practice standard, or operating limit, you must also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation.
- b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 3 to 40 C.F.R. 63 Subpart UUUUU that apply to you, 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 40 C.F.R. §63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and
- c. If you have a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report must contain the information in 40 C.F.R. §63.10031(d) (section d. of this condition). 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 40 C.F.R. §63.8(c)(7), the report must contain the information in 40 C.F.R. §63.10031(e) (condition 4.5.16.).
- d. For each excess emissions occurring at an affected source where you are using a CMS to comply with that emission limit or operating limit, you must include the information required in 40 C.F.R. §63.10(e)(3)(v) in the compliance report specified in section a. of this condition.

- e. If you had a malfunction 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.

You must submit the report semiannually according to the requirements in 40 C.F.R. §60.10031(b) (condition 4.5.15.).

[40 C.F.R. §63.10031(a), Table 8, Item #1; 40 C.F.R. §§63.10031(c)(1) through (4) and (6) through (9); 40 C.F.R. §63.10031(d); 40 C.F.R. §63.10031(g); 40 C.F.R. §63.10021(i); 45CSR34] (Unit 1 and Unit 2)

- 4.5.15. Unless the Administrator has approved a different schedule for submission of reports under 40 C.F.R. §63.10(a), you must submit each report by the date in Table 8 to 40 C.F.R. 63 Subpart UUUUU and according to the requirements in paragraphs (1) through (5) of this condition.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. §63.9984 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in 40 C.F.R. §63.9984.

(2) The first compliance report must be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 C.F.R. §63.9984.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) You may submit the first and subsequent compliance reports according to the dates in permit condition 3.5.6. instead of according to the dates in paragraphs (1) through (4) of this condition.

[40 C.F.R. §§63.10031(b)(1) through (5); 45CSR34] (Unit 1 and Unit 2)

- 4.5.16. You must report all deviations as defined in 40 C.F.R. 63 Subpart UUUUU in the semiannual monitoring report required by condition 3.5.6. If an affected source submits a compliance report pursuant to Table 8 to 40 C.F.R. 63 Subpart UUUUU (condition 4.5.14.) along with, or as part of, the semiannual monitoring report required by condition 3.5.6., and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in 40 C.F.R. 63 Subpart UUUUU, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

[40 C.F.R. §§63.10031(e); 45CSR34] (Unit 1 and Unit 2)

- 4.5.17. On or after April 16, 2017, within 60 days after the date of completing each performance test, you must submit the performance test reports required by this subpart to 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). Performance test data; CEMS performance evaluation test results; reports for SO₂ CEMS and sorbent trap monitoring system; compliance reports; and all reports required by 40 C.F.R. 63 Subpart UUUUU not subject to the requirements in 40 C.F.R. §63.10031(f) introductory text and §§63.10031(f)(1) through (4) must be submitted as further specified in 40 C.F.R. §§63.10031(f), (f)(1), (3), (4), (5), and (6).
[40 C.F.R. §§ 63.10031(f), (f)(1), (3), (4), (5), and (6); 45CSR34] (Unit 1 and Unit 2)

4.6. Compliance Plan

- 4.6.1. There is no compliance plan since a responsible official certified compliance with all applicable requirements in the Title V renewal application.

5.0 Material Handling [Emission point IDs identified in Equipment Table subsection 1.1.]

5.1. Limitations and Standards

- 5.1.1. Limestone transferred across belt conveyor BC-1 to Transfer House #1 [TH-1] shall be limited to a maximum transfer rate of 750 tons per hour and 1,100,000 tons per year.
[45CSR13, R13-2608, 4.1.1.]
- 5.1.2. Limestone transferred across belt conveyor BC-3 to Transfer House #2 [TH-2] shall be limited to a maximum transfer rate of 750 tons per hour and 1,100,000 tons per year.
[45CSR13, R13-2608, 4.1.2.]
- 5.1.3. Gypsum transferred across belt conveyor BC-9 to Transfer House #4 [TH-4] shall be limited to a maximum transfer rate of 200 tons per hour and 1,700,000 tons per year.
[45CSR13, R13-2608, 4.1.3.]
- 5.1.4. Gypsum and wastewater treatment system cake transferred across belt conveyor BC-14 to Transfer House #7 [TH-7] shall be limited to a maximum transfer rate of 1,000 tons per hour and 1,912,000 tons per year.
[45CSR13, R13-2608, 4.1.4.]
- 5.1.5. Gypsum transferred across belt conveyor BC-17 to Transfer House #7 [TH-7] shall be limited to a maximum transfer rate of 750 tons per hour and 1,200,000 tons per year.
[45CSR13, R13-2608, 4.1.5.]
- 5.1.6. Gypsum transferred across belt conveyor BC-19 to Transfer House #9 [TH-9] shall be limited to a maximum transfer rate of 1,000 tons per hour and 1,700,000 tons per year.
[45CSR13, R13-2608, 4.1.6.]
- 5.1.7. Coal transferred across belt conveyor HSC-1 shall be limited to a maximum transfer rate of 3,000 tons per hour and 5,732,544 tons per year.
[45CSR13, R13-2608, 4.1.7.]
- 5.1.8. Dry Sorbent (Trona or Hydrated Lime) for SO₃ mitigation shall be delivered to the facility at a maximum annual rate of 81,000 tons per year.
[45CSR13, R13-2608, 4.1.8.]
- 5.1.9. Liquid magnesium hydroxide shall be delivered to the facility at a maximum annual rate of 6,600,000 gallons per year.
[45CSR13, R13-2608, 4.1.9.]
- 5.1.10. Hydrated lime for the FGD wastewater treatment system shall be delivered to the facility at a maximum annual rate of 3,200 tons per year.
[45CSR13, R13-2608, 4.1.10.]
- 5.1.11. Ferric Chloride for the FGD wastewater treatment system shall be delivered to the facility at a maximum annual rate of 110,000 gallons per year.
[45CSR13, R13-2608, 4.1.11.]

- 5.1.12. Acid (hydrochloric or sulfuric) for the FGD wastewater treatment system shall be delivered to the facility at a maximum annual rate of 170,000 gallons per year.
[45CSR13, R13-2608, 4.1.12.]
- 5.1.13. Polymer and organosulfide for the FGD wastewater treatment facility shall be delivered to the facility at a maximum annual rate of 13,500 gallons per year.
[45CSR13, R13-2608, 4.1.13.]
- 5.1.14. The diesel-fired engines [6S and 7S] used to power the emergency quench water system shall be limited to a total maximum combined annual operating schedule of 200 hours per year.
[45CSR13, R13-2608, 4.1.14.]
- 5.1.15. Compliance with all annual operating limits shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the quantified operating data at any given time during the previous twelve (12) consecutive calendar months.
[45CSR13, R13-2608, 4.1.15.]
- 5.1.16. The permittee shall maintain a water truck on site and in good operating condition, and shall utilize same to apply water as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads and other work areas where mobile equipment is used. The spraybar shall be equipped with spray nozzles, of sufficient size and number, so as to provide adequate coverage to the area being treated.
- The pump delivering the water shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of water and at a sufficient pressure, so as to assure that the treatment process will minimize the atmospheric entrainment of fugitive particulate emissions generated from the haulroads and work areas where mobile equipment is used.
- [45CSR13, R13-2608, 4.1.16.]**
- 5.1.17. Additionally, at least three times per year the permittee shall apply a mixture of water and an environmentally acceptable dust control additive hereafter referred to as solution to all unpaved haul roads. The solution shall have a concentration of dust control additive sufficient to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads.
[45CSR13, R13-2608, 4.1.17.]
- 5.1.18. The installation and operation of the proposed Limestone Material Handling equipment [1S] and Limestone Processing equipment [3S] shall be subject to the limits and requirements set forth by 40 C.F.R. 60 - Subpart OOO, "*Standards of performance for non-metallic mineral processing plants.*"
- a. The material transfers across the conveyors within the enclosed transfer stations and ball mill within the processing building will be limited to the opacity emissions from the building or building vents. The buildings will be limited to emissions of no visible opacity per 40 C.F.R. §60.672(e)(1), and the vents from the buildings will be limited to an opacity of 7% and particulate emissions of 0.022 grains per dry standard cubic foot, per 40 C.F.R. §60.672(e)(2).
 - b. The emissions from the baghouse on each of the limestone day bins will be limited to 7% opacity per 40 C.F.R. §60.672(f).

- c. All material transfer points outside of the buildings will be limited to a maximum 10% opacity per 40 C.F.R. §60.672(b).
- d. In order to comply with the emission and opacity limitations of 40 C.F.R. 60 Subpart OOO, the permittee shall employ dust suppression methods to minimize particulate emissions from the limestone processing equipment. In order to demonstrate compliance, in accordance to the requirements of the regulation, the applicant shall conduct performance testing and monitoring activities as set forth by 40 C.F.R. 60 Subpart OOO.

[45CSR13, R13-2608, 4.1.19.; 40 C.F.R. Part 60, Subpart OOO; 45CSR16]

- 5.1.19. The maximum amount of fly ash handled by the fly ash handling system shall not exceed 800,000 tons per year on a dry (1% moisture) basis (i.e. 980,000 tons per year at 20% moisture). Compliance with the throughput limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the fly ash transferred for the previous twelve (12) consecutive calendar months.
[45CSR13, R13-2608, 4.1.20.]
- 5.1.20. PM emissions from Mechanical Exhausters ME-1A, ME-1B and ME-1C shall not exceed 0.16 lb/hr and 0.69 tpy individually nor 0.32 lb/hr and 1.38 tons per year combined.
[45CSR13, R13-2608, 4.1.21.]
- 5.1.21. PM emissions from Mechanical Exhausters ME-2A, ME-2B and ME-2C shall not exceed 0.15 lb/hr and 0.65 tpy individually nor 0.30 lb/hr and 1.30 tons per year combined.
[45CSR13, R13-2608, 4.1.22.]
- 5.1.22. PM emissions from Bin Vent Filters BVF-A, BVF-B and BVF-C shall not exceed 0.75 lb/hr nor 3.25 tpy combined.
[45CSR13, R13-2608, 4.1.23.]
- 5.1.23. PM emissions from the transfer of conditioned fly ash from the silos to trucks (WFA-AA, WFA-AB, WFA-BA, WFA-BB, WFA-CA, and WFA-CB) shall not exceed 0.07 pounds per hour nor 0.09 tons per year combined.
[45CSR13, R13-2608, 4.1.24.]
- 5.1.24. The Coal and Ash handling systems, and FGD and SCR material handling systems, are subject to 45CSR§2-5 as outlined in the facility wide section of this permit (condition 3.1.9.) regarding fugitive dust control system.

5.2. Monitoring Requirements

- 5.2.1. For the purpose of determining compliance with the material transfer limits set forth by Section 5.1.1. and 5.1.2. of this permit, the permittee shall monitor the hourly and annual limestone transfer rates across belt conveyor BC-1 to Transfer House #1 [TH-1] and across belt conveyor BC-3 to Transfer House #2 [TH-2].
[45CSR13, R13-2608, 4.2.1.]

- 5.2.2. For the purpose of determining compliance with the material transfer limits set forth by Sections 5.1.3., 5.1.4., 5.1.5. and 5.1.6. of this permit, the permittee shall monitor the hourly and annual gypsum and wastewater treatment cake transfer rates across belt conveyors BC-9 to Transfer House #4 [TH-4], BC-14 to Transfer House #7 [TH-7], BC-17 to the Transfer House #7 Extension, and BC-19 to Transfer House #9 [TH-9].
[45CSR13, R13-2608, 4.2.2.]
- 5.2.3. For the purpose of determining compliance with the material transfer limits set forth by Section 5.1.7. of this permit, the permittee shall monitor the hourly and annual coal transfer rates across belt conveyor HSC-1 to Transfer Station #2A.
[45CSR13, R13-2608, 4.2.3.]
- 5.2.4. For the purpose of determining compliance with the limits associated with the delivery of raw materials for the SO₃ mitigation system, as set forth by Section 5.1.8. and 5.1.9. of this permit, the permittee shall monitor the on-site delivery of dry sorbent (including trona and hydrated lime) and liquid magnesium hydroxide.
[45CSR13, R13-2608, 4.2.4.]
- 5.2.5. For the purpose of determining compliance with the limits associated with the delivery of raw materials for the FGD wastewater treatment system, as set forth by Sections 5.1.10. through 5.1.13. of this permit, the permittee shall monitor the on-site delivery of hydrated lime, ferric chloride, acid (hydrochloric or sulfuric), polymer and organosulfide.
[45CSR13, R13-2608, 4.2.5.]
- 5.2.6. For the purpose of determining compliance with the operating limits set forth by Section 5.1.14. of this permit, the permittee shall monitor the operating schedule of the diesel-fired engines [6S and 7S] used to power the emergency quench water system.
[45CSR13, R13-2608, 4.2.6.]
- 5.2.7. For the purpose of determining compliance with the limits associated with disposal of dry fly ash, as set forth by Section 5.1.19 of this permit, the permittee shall monitor and record the amount of dry fly ash disposed of.
[45CSR13, R13-2608, 4.2.7.]
- 5.2.8. For the purpose of determining compliance with the operating limits set forth by Section 5.1.17. of this permit, the permittee shall monitor and record the date that chemical solution is applied to the haulroads along with the amount and concentration of the solution applied.
[45CSR13, R13-2608, 4.2.8.]

5.3. Testing Requirements

- 5.3.1. Within 120 days of startup of the dry ash handling system, the permittee shall perform or have performed EPA approved tests (or other methods as approved by WVDAQ) to determine maximum PM emissions from any one of the Silo Bin Vent Filters (BVF-A, BVF-B or BVF-C).
[45CSR13, R13-2608, 4.3.2.]

5.4. Recordkeeping Requirements

- 5.4.1. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 5.2.1. of this permit, the permittee shall maintain monthly records of the amount of limestone transferred across the monitored belt conveyors.
[45CSR13, R13-2608, 4.4.4.]
- 5.4.2. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 5.2.2. of this permit, the permittee shall maintain monthly records of the amount of gypsum and wastewater treatment cake transferred across the monitored belt conveyors.
[45CSR13, R13-2608, 4.4.5.]
- 5.4.3. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 5.2.3. of this permit, the permittee shall maintain monthly records of the amount of coal transferred across the monitored belt conveyor.
[45CSR13, R13-2608, 4.4.6.]
- 5.4.4. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 5.2.4. of this permit, the permittee shall maintain monthly records of the amount of dry sorbent (trona and hydrated lime) and liquid magnesium hydroxide delivered to the facility via truck.
[45CSR13, R13-2608, 4.4.7.]
- 5.4.5. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 5.2.5. of this permit, the permittee shall maintain monthly records of the amount of hydrated lime, ferric chloride, acid (hydrochloric or sulfuric), polymer and organosulfide delivered to the facility via truck.
[45CSR13, R13-2608, 4.4.8.]
- 5.4.6. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 5.2.6. of this permit, the permittee shall maintain monthly records of the hours of operation of the diesel-fired engines [6S and 7S].
[45CSR13, R13-2608, 4.4.9.]
- 5.4.7. For the purposes of determining compliance with Section 5.1.16., 5.1.17., and 3.1.9. of this permit, the permittee shall maintain records of the amount of dust control additive used at the facility and the dates the solution was applied.
[45CSR13, R13-2608, 4.4.10.]
- 5.4.8. All records produced in accordance to the requirements set forth by Sections 5.4.1. through 5.4.7. of this permit shall be maintained in accordance with Section 3.3.2. of this permit. At a time prior to being submitted to the Director, all records shall be certified and signed by a “Responsible Official” or a duly authorized representative, utilizing the attached Certification of Data Accuracy statement (Appendix B).
[45CSR13, R13-2608, 4.4.11.]
- 5.4.9. For the purposes of determining compliance with the maximum throughput limit set forth in Condition 5.1.19. above, the facility shall maintain monthly (and calculated rolling yearly total) records of the amount of fly ash handled by the Units 1 and 2 fly ash system.
[45CSR13, R13-2608, 4.4.12.]

5.5. Reporting Requirements

5.5.1. Reserved.

5.6. Compliance Plan

5.6.1. A compliance plan is not included since a Responsible Official certified compliance with all applicable requirements in the renewal application.

6.0 Emergency Quench Water Pump Engines [emission point ID(s): 15E, 16E] and Emergency Diesel-Driven Fire Pumps [emission point ID(s): 17E, 18E]

6.1. Limitations and Standards

6.1.1. If you have an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

[40 C.F.R. §63.6595(a)(1); 45CSR34]

6.1.2. For emergency stationary CI RICE¹, you must meet the following requirements, except during periods of startup:

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first;²
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.³

During periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

¹ If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 C.F.R. 63 Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

² Sources have the option to utilize an oil analysis program as described in 40 C.F.R. §63.6625(i) (permit condition 6.1.6.) in order to extend the specified oil change requirement in Table 2c of 40 C.F.R. 63 Subpart ZZZZ.

³ Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. §63.6(g) for alternative work practices.

[40 C.F.R. §63.6602, Table 2c, Row 1; 40 C.F.R. §63.6625(h); 45CSR34]

6.1.3. At all times you must operate and maintain any 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. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the 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.

[40 C.F.R. §63.6605(b); 45CSR34]

- 6.1.4. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 C.F.R. §§63.6625(e) and 63.6625(e)(2); 40 C.F.R. §63.6640(a), Table 6, Item #9; 45CSR34]
- 6.1.5. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
[40 C.F.R. §63.6625(f); 45CSR34]
- 6.1.6. If you own or operate a stationary CI engine that is subject to the work, operation or management practices in item 1 of Table 2c to 40 C.F.R. 63 Subpart ZZZZ (permit condition 6.1.2.), you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c to 40 C.F.R. 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c to 40 C.F.R. 63 Subpart ZZZZ (permit condition 6.1.2.a.). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine (permit condition 6.1.4.).
[40 C.F.R. §63.6625(i); 45CSR34]
- 6.1.7. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (1) through (3) of this condition. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this condition, is prohibited. If you do not operate the engine according to the requirements in paragraphs (1) through (3) of this condition, the engine will not be considered an emergency engine under 40 C.F.R. 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (2).

- (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency
- (3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (2) of this condition. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§63.6640(f) and 63.6640(f)(1), (f)(2), and (f)(3); 45CSR34]

6.2. Monitoring Requirements

- 6.2.1. Reserved.

6.3. Testing Requirements

- 6.3.1. Reserved.

6.4. Recordkeeping Requirements

- 6.4.1. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan (permit condition 6.1.4.) if you own or operate an existing stationary emergency RICE.

[40 C.F.R. §§63.6655(e) and 63.6655(e)(2); 45CSR34]

6.4.2. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 C.F.R. §63.6640(f)(2)(ii) or (iii) (condition 6.1.7.(2)(ii) or (iii)), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
[40 C.F.R. §§63.6655(f) and 63.6655(f)(1); 45CSR34]

6.4.3. **Form and Retention of Records for 40 C.F.R. 63 Subpart ZZZZ.**

(a) Your records must be in a form suitable and readily available for expeditious review according to 40 C.F.R. §63.10(b)(1).

(b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1).

[40 C.F.R. §§63.6660(a), (b), and (c); 45CSR34]

6.5. Reporting Requirements

6.5.1. You must report each instance in which you did not meet each limitation in Table 2c to 40 C.F.R. 63 Subpart ZZZZ (permit condition 6.1.2.). These instances are deviations from the emission and operating limitations in 40 C.F.R. 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 C.F.R. §63.6650 (permit condition 6.5.3.).
[40 C.F.R. §63.6640(b); 45CSR34]

6.5.2. You must also report each instance in which you did not meet the requirements in Table 8 to 40 C.F.R. 63 Subpart ZZZZ that apply to you.
[40 C.F.R. §63.6640(e); 45CSR34]

6.5.3. The permittee must report all deviations as defined in 40 C.F.R. 63 Subpart ZZZZ in the semiannual monitoring report required by permit condition 3.5.6.
[40 C.F.R. §63.6650(f); 45CSR34]

6.6. Compliance Plan

6.6.1. A compliance plan is not included since a Responsible Official certified compliance with all applicable requirements in the renewal application.

**7.0 Liquid Propane Vapor Engine Driven Emergency Generator and Black Start Emergency Generators
 [emission point ID(s): LPG, EG-1, EG-2]**

7.1. Limitations and Standards

7.1.1. **Emission Limitations.** The registrant shall not cause, suffer, allow or permit emissions of VOC, NO_x, and CO, from any registered reciprocating internal combustion engine to exceed the potential to emit (pounds per hour and tons per year) listed in the General Permit Registration.

Source ID#	Nitrogen Oxides		Carbon Monoxide		Volatile Organic Compounds	
	lb/hr	ton/yr ¹	lb/hr	ton/yr ¹	lb/hr	ton/yr ¹
LPG	0.74	0.19	21.75	5.44	0.22	0.06
EG-1	59.9	14.98	7.66	1.92	0.94	0.24
EG-2	36.4	9.1	4.85	1.21	1.18	0.30
TOTAL	97.04	24.27	34.26	8.57	2.34	0.60

¹ Based on operating the engine 500 hours per year.

[45CSR13, G60-C057 General Permit Registration, Emission Limitations; General Permit G60-C, Condition 5.1.2.]

7.1.2. The spark ignition engine LPG is registered under Class II General Permit G60-C (Appendix F) and is subject to Sections 1.0, 2.0, 3.0, and 4.0 of the General Permit.

The following sections of Class II General Permit G60-C (Appendix F) apply to LPG:

Section 5 Reciprocating Internal Combustion Engines (R.I.C.E.)

Section 8 Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 C.F.R. 60 Subpart JJJJ)

Note: Compliance with the applicable requirements of 40 C.F.R. 60 Subpart JJJJ in Section 8 of General Permit G60-C ensures compliance with §§63.6590(c) and (c)(3) of 40 C.F.R. 63 Subpart ZZZZ.

[45CSR13, G60-C057 General Permit Registration; 40 C.F.R. 60 Subpart JJJJ; 45CSR16; 40 C.F.R. §§63.6590(c) and (c)(3); 45CSR34]

- 7.1.3. The compression ignition engines EG-1 and EG-2 are registered under Class II General Permit G60-C (Appendix F) and are subject to Sections 1.0, 2.0, 3.0, and 4.0 of the General Permit.

The following sections of Class II General Permit G60-C (Appendix F) apply to EG-1 and EG-2:

Section 5 Reciprocating Internal Combustion Engines (R.I.C.E.)

Section 7 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 C.F.R. 60 Subpart IIII)

[45CSR13, G60-C057 General Permit Registration; 40 C.F.R. 60 Subpart IIII; 45CSR16]

7.2. Monitoring Requirements

- 7.2.1. See Sections 5, 7, and 8 of Class II Emergency Generator General Permit G60-C (Appendix F).

7.3. Testing Requirements

- 7.3.1. See Sections 5, 7, and 8 of Class II Emergency Generator General Permit G60-C (Appendix F).

7.4. Recordkeeping Requirements

- 7.4.1. Maintain monthly records of the amount of fuel consumed by each engine to demonstrate compliance with the hourly and annual emission limits in condition 7.1.1. Compliance with annual emission limits shall be based on a 12-month rolling total.

[45CSR13, G60-C, 5.4.1.; 45CSR§30-5.1.c.] (LPG, EG-1, EG-2)

- 7.4.2. Maintain monthly records of the hours of operation of each engine to demonstrate that the 12-month rolling total of operating hours does not exceed the operating hours limitation in condition 7.1.1.

[45CSR13, G60-C, 5.4.1.; 45CSR§30-5.1.c.] (LPG, EG-1, EG-2)

7.5. Reporting Requirements

- 7.5.1. See Sections 5, 7, and 8 of Class II Emergency Generator General Permit G60-C (Appendix F).

- 7.5.2. If you are required to submit an Initial Notification but are otherwise not affected by the requirements of 40 C.F.R. 63 Subpart ZZZZ, in accordance with 40 C.F.R. §63.6590(b), your notification should include the information in 40 C.F.R. §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

The notification shall be submitted to the Administrator in writing within 120 calendar days after the initial startup of the source.

[40 C.F.R. §§ 63.6590(b)(1), 63.6590(b)(1)(i), and 63.6645(f); 40 C.F.R. §63.9(b)(2); 45CSR34] (EG-1, EG-2)

7.6. Compliance Plan

7.6.1. Reserved.

APPENDIX A

45CSR2 & 45CSR10 Monitoring Plan

45 CSR 2 and 45 CSR 10 Monitoring and Recordkeeping Plan

Mitchell Plant

Facility Information:

Facility Name: Mitchell Plant

Facility Address: P.O. Box K
State Route 2
Moundsville, WV 26041

Facility Environmental Contact: Mr. J. W. Palmer
Production Support Superintendent - Environmental

A. Facility Description:

Mitchell Plant is a coal-fired electric generating facility with two main combustion units (Units 1 and 2) discharging through a common stack shell that utilizes two separate stack discharge flues. Mitchell plant also has an auxiliary boiler (Aux. 1) that discharges through an independent auxiliary stack (Aux ML1). Unit 1, Unit 2, and Aux. Boiler 1 each have a design heat input greater than 10 mmBTU/hr making both 45 CSR 2A (Interpretive Rule for 45 CSR 2) and 45 CSR 10A (Interpretive Rule for 45 CSR 10) applicable to these sources.

I. 45 CSR 2 Monitoring Plan:

In accordance with Section 8.2.a of 45 CSR 2, following is the proposed plan for monitoring compliance with opacity limits found in Section 3 of that rule:

A. Main Stack (1E, 2E)

1. Applicable Standard:

45 CSR 2, §3.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

2. Monitoring Method(s):

45 CSR 2, §3.2 ...Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emissions control.

45 CSR 2, §8.2.a.1. *Direct measurement with a certified continuous opacity monitoring system (COMS) shall be deemed to satisfy the requirements for a monitoring plan. Such COMS shall be installed, calibrated, operated and maintained as specified in 40 CFR Part 60, Appendix B, Performance Specification 1 (PS1). COMS meeting the requirements of 40 CFR Part 75 (Acid Rain) will be deemed to have satisfied the requirements of PS1.*

- a. **Primary Monitoring Method:** While a Continuous Opacity Monitoring System (COMS) would not be required on a wet scrubbed fuel burning unit, Mitchell Plant has chosen to employ COMS on each of the fuel burning units upstream of the wet scrubbers and located in plant ductwork. As such, the primary method of monitoring opacity at Mitchell Plant will be Continuous Opacity Monitors (COMS). The COMS are installed, maintained and operated in compliance with requirements of 40 CFR Part 75.
- b. **Other Credible Monitoring Method(s):** While Mitchell Plant will use COMS as the primary method of monitoring opacity of the fuel burning units, we are also reserving the right to use other appropriate method that would produce credible data. These “other monitoring methods” will generally be used in the absence of COMS data or as other credible evidence used in conjunction with COMS data.

3. Recordkeeping:

a. **Operating Schedule and Quality/Quantity of Fuel Burned**

45 CSR 2A §7.1.a. *The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit as specified in paragraphs 7.1.a.1 through 7.1.a.6, as applicable.*

The applicable paragraphs for Mitchell Plant are the following:

§7.1.a.2: *For fuel burning unit(s) which burn only distillate oil, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a monthly basis and a BTU analysis for each shipment.*

§7.1.a.4: *For fuel burning unit(s) which burn only coal, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis and an ash and BTU analysis for each shipment.*

§7.1.a.6: *For fuel burning unit(s) which burn a combination of fuels, the owner or operator shall comply with the applicable Recordkeeping requirements of paragraph 7.1.a.1 through 7.1.a.5 for each fuel burned.*

The date and time of each startup and shutdown of Units 1 and 2 will be maintained. The quantity of coal burned on a daily basis as well as the ash and Btu content will also be maintained. From a fuel oil perspective, the quantity of fuel oil burned on a monthly basis, as well as the Btu content will be maintained. The fuel oil analysis will generally be one that is provided by the supplier for a given shipment but in some cases, we may use independent sampling and analyses. The quantity of fuel oil burned on a monthly basis may be maintained on a facility wide basis.

b. Record Maintenance

45 CSR 2A §7.1.b. *Records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.*

Records of all required monitoring data and support information will be maintained on-site for at least five (5) years. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.

4. Exception Reporting:

a. Particulate Mass Emissions:

45 CSR 2A, §7.2.a. *With respect to excursions associated with measured emissions under Section 4 of 45CSR2, compliance with the reporting and testing requirements under the Appendix to 45CSR2 shall fulfill the requirement for a periodic exception report under subdivision 8.3.b. or 45CSR2.*

Mitchell Plant will comply with the reporting and testing requirements specified under the Appendix to 45 CSR 2.

b. Opacity:

45 CSR 2A, §7.2.b. *COMS – In accordance with the provisions of this subdivision, each owner or operator employing COMS as the method of monitoring compliance with opacity limits shall submit a “COMS Summary Report” and/or an “Excursion and COMS Monitoring System Performance Report” to the Director on a quarterly basis; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). All reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter. The COMS Summary Report shall contain the information and be in the format shown in Appendix B unless otherwise specified by the Director.*

45 CSR 2A, §7.2.b.1. *If the total duration of excursions for the reporting period is less*

than one percent (1%) of the total operating time for the reporting period and monitoring system downtime for the reporting period is less than five percent (5%) of the total operating time for the reporting period, the COMS Summary Report shall be submitted to the Director; the Excursion and COMS Monitoring System Performance report shall be maintained on-site and shall be submitted to the Director upon request.

45 CSR 2A, §7.2.b.2. *If the total duration of excursions for the reporting period is one percent (1%) or greater of the total operating time for the reporting period or the total monitoring system downtime for the reporting period is five percent (5%) or greater of the total operating time for the reporting period, the COMS Summary Report and the Excursion and COMS Monitoring System Performance Report shall both be submitted to the Director.*

45 CSR 2A, §7.2.b.3. *The Excursion and COMS Monitoring System Performance Report shall be in a format approved by the Director and shall include, but not be limited to, the following information:*

45 CSR 2A, §7.2.b.3.A. *The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion.*

45 CSR 2A, §7.2.b.3.B. *Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility.*

45 CSR 2A, §7.2.b.3.C. *The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any).*

45 CSR 2A, §7.2.b.3.D. *The date and time identifying each period during which quality- controlled monitoring data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system.*

45 CSR 2A, §7.2.b.3.E. *When no excursions have occurred or there were no periods of quality-controlled data unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report.*

Attached, as Appendices A and B are sample copies of a typical COMS “Summary Report” and “Excess opacity and COM downtime report” that we plan on using to fulfill the opacity reporting requirements. The COMS “Summary Report” will satisfy the conditions under 45 CSR 2A, §7.2.b for the “COMS Summary Report” and will be submitted to the Director according to its requirements. The “Excess opacity and COM downtime report” satisfies the conditions under 45 CSR 2A, §7.2.b.3. for the “Excursion and COMS Monitoring System Performance Report”. The “Excess opacity and COM downtime report” shall be submitted to the Director following the conditions outlined in 45 CSR 2A, §7.2.b.1. and §7.2.b.2.

To the extent that an excursion is due to a malfunction, the reporting requirements in section 9

of 45CSR2 shall be followed – 45 CSR 2A, §7.2.d.

B. Aux. Stack (Aux ML1)

1. Applicable Standard:

45 CSR 2, §3.1. *No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.*

2. Monitoring Method:

45 CSR 2, §8.2.a.1. *Direct measurement with a certified continuous opacity monitoring system (COMS) shall be deemed to satisfy the requirements for a monitoring plan. Such COMS shall be installed, calibrated, operated and maintained as specified in 40 CFR Part 60, Appendix B, Performance Specification 1 (PS1). COMS meeting the requirements of 40 CFR Part 75 (Acid Rain) will be deemed to have satisfied the requirements of PS1.*

45 CSR 2, §8.4.a. *The owner or operator of a fuel burning unit(s) may petition for alternatives to testing, monitoring, and reporting requirements prescribed pursuant to this rule for conditions, including, but not limited to, the following:*

45 CSR 2, §8.4.a.1. *Infrequent use of a fuel burning unit(s)*

Pursuant to 45 CSR 2, Section 8.4.a and 8.4.a.1, Mitchell Plant previously petitioned the Office of Air Quality (OAQ) Chief for alternative testing, monitoring, and reporting requirements for the auxiliary boiler and associated stack. Based on limited operating hours, the requirement for COMS installation per Section 6.2.a of interpretive rule 45 CSR 2A was determined to be overly-burdensome and sufficient reason for the granting of alternative monitoring methods. The alternative monitoring method based on USEPA Method 9 visible emission readings is described below.

- **Primary Monitoring Method:** As an alternative to COMS monitoring, a Method 9 reading will be conducted one time per month provided the following conditions are met: 1) The auxiliary boiler has operated at normal, stable load conditions for at least 24 consecutive hours and 2) weather/lighting conditions are conducive to taking proper Method 9 readings. Since the Mitchell auxiliary boiler does not utilize post-combustion particulate emissions controls, operating parameters of control equipment are nonexistent and therefore unable to be monitored.

3. Recordkeeping:

a. Operating Schedule and Quality/Quantity of Fuel Burned

45 CSR 2A §7.1.a. *The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit as specified in paragraphs 7.1.a.1 through 7.1.a.6, as applicable.*

The applicable paragraph for the Mitchell Plant auxiliary boilers follows:

§7.1.a.2: *For fuel burning unit(s) which burn only distillate oil, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a monthly basis and a BTU analysis for each shipment.*

As such, the date and time of each startup and shutdown of the auxiliary boiler will be maintained. The quantity of fuel oil burned on a monthly basis, as well as the Btu content will be maintained. The fuel oil analysis will generally be one that is provided by the supplier for a given shipment but in some cases, we may use independent sampling and analyses. The quantity of fuel oil burned on a monthly basis may be maintained on a facility wide basis.

b. Record Maintenance

45 CSR 2A §7.1.b. *Records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.*

Records of all required monitoring data and support information will be maintained on-site for at least five (5) years. In the case of the auxiliary boilers, strip chart recordings, etc. are generally not available.

4. Exception Reporting:

Pursuant to 45 CSR 2, Section 8.4.a and 8.4.a.1, Mitchell Plant previously petitioned the Office of Air Quality (OAQ) Chief for alternative testing, monitoring, and reporting requirements for the auxiliary boiler and associated stack.

- a. Particulate Mass Emissions** – As an alternative to the testing and exception reporting requirements for particulate mass emissions from the auxiliary boiler, the following was previously proposed and approved. Based on an average heat content of approximately 139,877 Btu/gallon (calendar year 2000 data) and an AP-42 based particulate mass emissions emission factor of 2 lbs/thousand gallons, the calculated particulate mass emissions of the auxiliary boiler are 0.01 lb/mmBTU. As such, the fuel analysis records maintained under the fuel quality analysis and recordkeeping section of this plan provide sufficient evidence of

compliance with the particulate mass emission limit. For the purpose of meeting exception reporting requirements, any fuel oil analysis indicating a heat content of less than 25,000 Btu per gallon will be reported to the OAQ to fulfill the requirement for a periodic exception report under subdivision 8.3.b. or 45 CSR 2 – 45 CSR 2A, §7.2.a. A heat content of 25,000 Btu/gal and a particulate emissions factor of 2 lbs/thousand gallons would result in a calculated particulate mass emissions of approximately 90% of the applicable 45 CSR 2 standard.

- b. **Opacity** – As an alternative to the exception reporting requirements for opacity emissions from the auxiliary boiler, the following was previously proposed and approved. We will maintain a copy of each properly conducted (correct weather/lighting conditions, etc.) Method 9 evaluation performed. Any properly conducted Method 9 test which indicates an exceedance shall be submitted to the OAQ on a quarterly basis (within 30 days of the end of the quarter) along with an accompanying description of the excursion cause, any corrective action taken, and the beginning and ending times for the excursion.

To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45CSR2 shall be followed – 45 CSR 2A, §7.2.d.

If no exceptions have occurred during the quarter, then a report will be submitted to the OAQ stating so. This will identify periods in which no method 9 tests were conducted (e.g. unit out of service) or when no fuel oil was received.

II. 45 CSR 10 Monitoring Plan:

In accordance with Section 8.2.c of 45 CSR 10, following is the proposed plan for monitoring compliance with the sulfur dioxide weight emission standards expressed in Section 3 of that rule:

A. Main Stack (1E, 2E)

1. Applicable Standard:

45 CSR 10, §3.1.b. *For fuel burning units of the Mitchell Plant of Kentucky Power Company, located in Air Quality Control Region I, the product of 7.5 and the total actual operating heat inputs for such units discharging through those stacks in million BTU's per hour.*

45 CSR 10, §3.8. *Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on continuous twenty-four (24) hour averaging time...A continuous twenty-four (24) hour period is defined as one (1) calendar day.*

A new SO₂ limit will likely be established as a result of the installation of the flue gas desulfurization system/new stack configuration and the subsequent NAAQS compliance demonstration modeling. Assuming that revised SO₂ limit is more stringent than the current limit expressed in 45 CSR 10, Mitchell Plant SO₂ emissions will be regulated by the more stringent of the two limits.

2. Monitoring Method:

45 CSR 10, §8.2.c.1. *The installation, operation and maintenance of a continuous monitoring system meeting the requirements 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2) or Performance Specification 7 (PS7) shall be deemed to fulfill the requirements of a monitoring plan for a fuel burning unit(s), manufacturing process source(s) or combustion source(s). CEMS meeting the requirements of 40 CFR Part 75 (Acid Rain) will be deemed to have satisfied the requirements of PS2.*

- a. **Primary Monitoring Method:** The primary method of monitoring SO₂ mass emissions from the two new stack flues (located within one stack shell) will be Continuous Emissions Monitors (CEMS). Data used in evaluating the performance of the Mitchell Units with the applicable standard will be unbiased, unsubstituted data as specified in definition 45 CSR 10A, §6.1.b.1. Data capture of more than 50% constitutes sufficient data for the daily mass emissions to be considered valid. The CEMS are installed, maintained and operated in compliance with requirements of 40 CFR Part 75. Because Units 1 and 2 will discharge through separate flues and both units are “Type a” fuel burning units as defined in 45 CSR 10, the plant-wide limit is calculated by summing the limits from the two flues.
- b. **Other Credible Monitoring Method(s):** While Mitchell Plant will use CEMS as the primary method of monitoring SO₂ mass emissions from the two flues, we are also reserving the right to use other appropriate methods that would produce credible data. These “other monitoring methods” will generally be used in the absence of CEMS data or as other credible evidence used in conjunction with CEMS data.

3. Recordkeeping:

a. **Operating Schedule and Quality/Quantity of Fuel Burned:**

45 CSR 10A, §7.1.a. *Fuel burning units - The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quality or quantity of fuel burned in each unit...*

45 CSR 10A, §7.1.c. *The owner or operator of a fuel burning unit or combustion source which utilizes CEMS shall be exempt from the provisions of subdivision 7.1.a. or 7.1.b, respectively.*

As such, Mitchell plant will not maintain records of the operating schedule and the quality and quantity of fuel burned in each unit for purposes of meeting the requirements for a monitoring plan under 45 CSR 10. While fuel sampling and analysis may continue to be performed at this facility, it is done so at the discretion of the owner/operator and is not required by this monitoring plan for the purposes of indicating compliance with SO₂ standards.

b. Record Maintenance

45 CSR 10A, §7.1.d. *For fuel burning units, manufacturing process sources, and combustion sources, records of all required monitoring data as established in an approved monitoring plan and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.*

As such, CEMS records at Mitchell Plant will be maintained for at least five years.

4. Exception Reporting:

45 CSR 10A, §7.2.a. *CEMS - Each owner or operator employing CEMS for an approved monitoring plan, shall submit a “CEMS Summary Report” and/or a “CEMS Excursion and Monitoring System Performance Report” to the Director quarterly; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the source. All reports shall be postmarked no later than forty-five (45) days following the end of each calendar quarter. The CEMS Summary Report shall contain the information and be in the format shown in Appendix A unless otherwise specified by the Director.*

45 CSR 10A, §7.2.a.1. *Submittal of 40 CFR Part 75 data in electronic data (EDR) format to the Director shall be deemed to satisfy the requirements of subdivision 7.2.a.*

As such, Mitchell Plant will submit the 40 CFR 75 quarterly electronic data reports (EDRs) to the OAQ to meet the requirements for a CEMS Summary Report and the CEMS Excursion and Monitoring System Performance Report. The EDR reports will be submitted to the OAQ no later than 45 days following the end of the quarter.

When no excursions of the 24-hour SO₂ standard have occurred, such information shall be stated in the cover letter of the EDR submittal.

B. Aux. Stack (Aux ML1)

1. Applicable Standard:

45 CSR 10, §3.1.e. *For type ‘b’ and Type ‘c’ fuel burning units, the product of 3.1 and the total design heat inputs for such units discharging through those stacks in million BTU’s per hour.*

45 CSR 10, §3.8. *Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on continuous twenty-four (24) hour averaging time...A continuous twenty-four (24) hour period is defined as one (1) calendar day.*

2. Monitoring, Recordkeeping, Exception Reporting Requirements:

45 CSR 10, §10.3. *The owner or operator of a fuel burning unit(s) which combusts natural gas, wood or distillate oil, alone or in combination, shall be exempt from the requirements of section 8.*

As such, the Mitchell Plant auxiliary boiler (auxiliary stack) is exempt from Testing, Monitoring, Recordkeeping, and Reporting requirements found in 45 CSR 10, Section 8 because the fuel burning source combusts only distillate oil. 45 CSR 10, Section 8 also contains the requirement for the development of a monitoring plan. The simple nature of burning distillate oil results in an SO₂ emission rate well below the standard.

While fuel sampling and analysis may continue to be performed at this facility, it is done so at the discretion of the owner/operator and is not required by this monitoring plan for the purposes of indicating compliance with SO₂ standards.

Revisions of Monitoring Plan:

Mitchell Plant reserves the right to periodically revise the conditions of this monitoring plan. Any revised plan will become effective only after approval by the OAQ.

Implementation of Revised Monitoring Plan:

Implementation of this revised monitoring plan will occur in concurrence with the installation and operation of the new stack for Units 1 and 2 at Mitchell Plant.

SUMMARY REPORT

Pollutant		Opacity	
Company		American Electric Power Philip Sporn Plant	
Emission Limitation	Regulation	Limit	Units
	45 CSR 2	10	%
Total source Operating Time		132,361 minutes	

Reporting Period: Calendar Quarter	10/1/00	to	12/31/00
Monitor Manufacturer:	United Sciences, Inc.		
Model Number:	500C		
Date of last Certification or Audit:	11/28/00		
Process Unit(s) Description:	Units 1-4 Stack, Four coal fired power generation units attached to a common stack (CS014).		

Emissions Data Summary

1. Duration of excess emissions in reporting period due to:

a. Startup / Shutdown	1206 minutes
b. Soot Blowing	0 minutes
c. Malfunction due to Control Equipment Problems	96 minutes
d. Malfunction due to Process Problem	12 minutes
e. Other Known Causes	0 minutes
f. Unknown Causes	0 minutes
2. Total Duration	1314 minutes
3. Percent Excess Emission	0.99 %

% Excess = 100 * (Total Duration / Total Source Operating Time)

COMS Performance Summary

1. COMS Downtime in reporting period due to:

a. Monitor Equipment Malfunction	66 minutes
b. Other Equipment Malfunction	0 minutes
c. Quality Assurance Calibration	1170 minutes
d. Other Known Causes	0 minutes
e. Unknown Causes	0 minutes
2. Total COMS Downtime	1236 minutes
3. Percent COMS Downtime	0.93 %

% Downtime = 100 * (Total COMS Downtime / Total Source Operating Time)

Appendix A
Sample

Please Note:

1. Separate Summary Reports are required for each boiler in the system when it has separate monitoring equipment.
2. Total source operating time means the total time which affected source is operating, including all periods of start-up, shut-down, malfunction, soot blowing, or COMS downtime as those terms are defined under the rule.
3. All times for opacity must be reported in minutes.
4. On a separate page describe any changes since the last reporting period to the COMS process or controls.
5. Other reports may be necessary to meet requirements.

EXCESS OPACITY AND COM DOWNTIME REPORT

Page: 1

Facility Name: PHILIP SPORN
 Address: P.O. BOX 389
 New Haven, WV 25265

Report Period: 10/01/00 to 12/31/00
 Emission Limit: 10.499

Stack/Unit ID: CS014

Parameter Name: OPACSOA

Date	Start Time	End Time	Duration (Minutes)	Average Opacity	Maximum Opacity	Causes/ Corrective Action
10/01/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/02/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/03/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/04/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/05/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/06/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/07/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/08/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/09/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/10/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/10/00	0606	0618	12	11	11	TR Set Trip Reset TR
10/10/00	0636	0642	6	11	11	TR Set Trip Reset TR
10/10/00	0824	0836	12	11	11	TR Set Trip Reset TR
10/11/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/11/00	1130	1224	54	-	-	COM Repair, COM o/s COM Lens Cleaned
10/12/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/13/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/14/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/15/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/16/00	0106	0118	12	-	-	Monitor Calibration/QA, COM o/s Completed COM Calibration/QA Activity
10/16/00	1448	1454	6	15	15	Unit Tripped None

Appendix B
 Sample

* = Time period does not end during selected time range

APPENDIX B

Certification of Data Accuracy

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title _____
(please print or type) Name Title

Telephone No. _____ Fax No. _____

¹ This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (I) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.

APPENDIX C

DAQ letter dated September 3, 2002 regarding Thermal Decomposition of Boiler Cleaning Solution



Division of Air Quality
7012 MacCorkle Avenue, SE
Charleston, WV 25304-2943
Telephone Number: (304) 926-3647
Fax Number: (304) 926-3739

West Virginia Department of Environmental Protection

Bob Wise
Governor

Michael O. Callaghan
Cabinet Secretary

Mr. Greg Wooten
Senior Engineer
American Electric Power
1 Riverside Plaza
Columbus, Ohio 43215-2373

September 3, 2002

Dear Mr. Wooten:

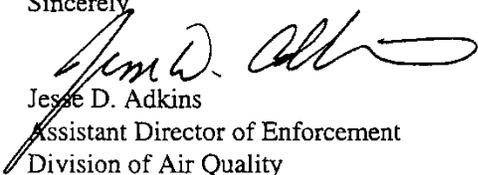
RE: Thermal Decomposition of Boiler Cleaning Solution at AEP Facilities (i.e. Kammer, Mitchell, Mountaineer, Philip Sporn, Amos or Kanawha River Plants)

Based on the information you provided by email dated August 19, 2002, subsequent phone conversations, and email dated September 3, 2002, (copies attached) the Division is granting approval for AEP to thermally decompose boiler cleaning solution in the boilers at the AEP facilities identified above.

The DAQ is granting approval for AEP to thermally decompose boiler cleaning solution at the AEP facilities identified above, on an as needed and pre-approved basis, subject to the DAQ notification requirements, as outlined in the attached document titled "American Electric Power Boiler Chemical Cleaning Process Evaporation Notification Procedure", as revised.

If you have any questions regarding this matter please contact Laura Mae Crowder of my staff at (304) 926-3647.

Sincerely,


Jesse D. Adkins
Assistant Director of Enforcement
Division of Air Quality

cc: file



West Virginia Department
of Environmental Protection

"Promoting a healthy environment."

AMERICAN ELECTRIC POWER BOILER CHEMICAL CLEANING PROCESS EVAPORATION NOTIFICATION PROCEDURE

- Step 1. The spent boiler chemical cleaning process liquid will be collected and stored on site in temporary (frac) tanks and/or permanently installed Metal Cleaning storage tanks. One sample will be collected for laboratory analysis from each storage tank, unless the tanks were manifolded together such that a number of tanks were filled simultaneously, resulting in the co-mingling of the solution in those tanks; in which case, one representative sample may be collected from each group of tanks that were manifolded together. The analyses from the tanks will be used to determine the hazard characteristics of the total volume of material.
- Step 2. Upon receipt and assessment of the laboratory TCLP analyses, the hazard characteristics of the spent cleaning solution will be determined. Upon being confirmed non-hazardous, the "AEP facility" (i.e. Kammer, Mitchell, Mountaineer, Philip Sporn, Amos, or Kanawha River Plant) will proceed with the process to thermally decompose (evaporate) the spent material in a boiler on site.
- Step 3. The AEP facility will notify West Virginia DAQ by telephone, facsimile or email on or before the day of scheduled commencement for the evaporation of the non-hazardous spent cleaning solution. AEP will submit via facsimile to the Compliance and Enforcement Section of the DAQ, a minimum of one (1) business day prior to commencement of the thermal decomposition process, the following information:
- ◆ The results of the laboratory TCLP analyses
 - ◆ The volume of spent cleaning solution to be evaporated
 - ◆ The designated boiler(s) in which the spent cleaning solution will be evaporated
 - ◆ The expected schedule for completing the process
- Step 4. AEP will perform evaporation of the spent cleaning solution in the designated boiler(s) in accordance with the appropriate chemical cleaning process document (e.g. "Kammer/Mitchell Plant Chemical Cleaning Process") and this notification procedure.

APPENDIX D

DAQ letter dated January 21, 2004 regarding Demineralizer Resin Burn



Division of Air Quality
7012 MacCorkle Avenue, SE
Charleston, WV 25304-2943
Telephone Number: (304) 926-3647
Fax Number: (304) 926-3739

West Virginia Department of Environmental Protection

Bob Wise
Governor

Stephanie R. Timmermeyer
Cabinet Secretary

Mr. Frank Blake
Engineer – Environmental Services
American Electric Power
1 Riverside Plaza – Floor 22
Columbus, Ohio 43215-2373

January 21, 2004

Dear Mr. Blake:

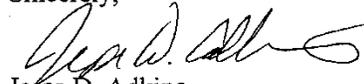
RE: Demineralizer Resin Burn at AEP Facilities (i.e. John Amos, Kammer, Mitchell, Mountaineer, Philip Sporn, or Kanawha River Plants)

Based on the information you provided during phone conversations on November 14, 2003 as well as by paper mail on November 25, 2003, the Division of Air Quality (DAQ) is granting approval for AEP to burn demineralizer resin in the boilers at the AEP facilities identified above.

The DAQ is granting approval for AEP burn demineralizer resin at the AEP facilities identified above on an as needed and pre-approved basis, subject to the DAQ notification requirements, as outlined in the document titled “American Electric Power Demineralizer Resin Burn Notification Procedure” as revised.

If you have any questions regarding this matter please contact Michael Rowe of my staff at (304) 926-3647.

Sincerely,


Jesse D. Adkins
Assistant Director of Enforcement
Division of Air Quality

cc: file
M. Dorsey, DWWM



West Virginia Department
of Environmental Protection

“Promoting a healthy environment.”

AMERICAN ELECTRIC POWER DEMINERALIZER RESIN BURN NOTIFICATION PROCEDURE

- Step 1. An appropriate number of samples representative of the used demineralizer resin to be consumed in the boiler will be collected for laboratory analysis to determine the hazard characteristics of the total volume of the material. Analysis will be completed using ASTM approved methods and by a WV Department of Environmental Protection certified laboratory.
- Step 2. Upon receipt and assessment of the laboratory TCLP analysis, the hazard characteristics of the used demineralizer resin will be determined. Upon being confirmed as non-hazardous, the AEP facility will proceed to notify the West Virginia DAQ of the intent to burn the demineralizer resin. If the material is determined to be hazardous, it must be disposed of in accordance with 33CSR20 "Hazardous Waste Management Rule". Questions concerning this rule should be directed to the Division of Water and Waste Management (DWWM) at 304 558-5989.
- Step 3. The AEP facility will notify the West Virginia DAQ by telephone, facsimile or email at least one business day before the scheduled commencement for the burn of the non-hazardous demineralizer resin. AEP will submit via facsimile to the Compliance and Enforcement Section of the DAQ, a minimum of one (1) business day prior to commencement of the demineralizer resin burn, the following information:
- ◆ The results of the laboratory TCLP analyses
 - ◆ The volume and/or amount of demineralizer resin to be burned
 - ◆ The designated boiler(s) in which the demineralizer resin will be burned.
 - ◆ The expected schedule with beginning and end dates and times for completing the process
 - ◆ The notification will be formatted with a subject line clearly defining the purpose of the notification and the facility where the resin will be burned.
- Step 4. AEP will perform the demineralizer resin burn in the designated boiler(s) in accordance with the submitted notification. AEP will maintain records on site of all demineralizer resin burned. These records will include the date, time, boiler, load condition, volume/amount of resin and TCLP analysis.

APPENDIX E

~~CAIR Permit Application~~

[Transport Rule Requirements](#)



CAIR Permit Application

Page 1

For sources subject to the Clean Air Interstate Rule Trading Programs under 45CSR39, 45CSR40 and 45CSR41, the West Virginia Department of Environmental Protection, Division of Air Quality has prepared this CAIR Permit Application. Please refer to sections 21 and 22 of 45CSR39, 45CSR40 and 45CSR41, as applicable.

This submission is: New Revised

STEP 1
 Identify the source by plant name, and ORIS or facility code

Mitchell Plant	051-00005	3948
Plant Name	West Virginia ID Number	ORIS/Facility Code

STEP 2
 Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO _x Annual	NO _x Ozone Season	SO ₂ Annual
1	X	X	X
2	X	X	X
AUX1		X	

STEP 3
 Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements
 (a) **Permit Requirements.**
 (1) The CAIR designated representative of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall:
 (i) Submit to the Secretary a complete CAIR permit application under 45CSR§39-22, 45CSR§40-22 and 45CSR§41-22 (as applicable) in accordance with the deadlines specified in 45CSR§39-21, 45CSR§40-21 and 45CSR§41-21 (as applicable); and
 (ii) Submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.
 (2) The owners and operators of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall have a CAIR permit issued by the Secretary under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for the source and operate the source and the unit in compliance with such CAIR permit.
 (3) Except as provided in sections 80 through 88 of 45CSR39, 45CSR40 and 45CSR41, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) that is not otherwise required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) that is not otherwise required to have a Title V operating permit are not required to submit a CAIR permit application and to have a CAIR permit, under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for such CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and such CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable).

Mitchell Plant

Plant Name

STEP 3,
continued

(b) Monitoring, reporting and recordkeeping requirements.

(1) The owners and operators and the CAIR designated representative, of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) with the CAIR NO_x Annual emissions limitation, CAIR NO_x Ozone Season emissions limitation and CAIR SO₂ emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

(c) Nitrogen oxides annual emissions requirements.

(1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO_x Annual source and each CAIR NO_x Annual unit at the source shall hold, in the source's compliance account, CAIR NO_x Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.

(2) A CAIR NO_x Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.

(3) A CAIR NO_x Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO_x Annual allowance was allocated.

(4) CAIR NO_x Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

(5) A CAIR NO_x Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Annual allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_x Annual allowance to or from a CAIR NO_x Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO_x Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.

(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.

(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.

(5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(e) Sulfur dioxide annual emission requirements.

(1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

(2) A CAIR SO₂ unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.

(3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.

(4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with sections 51 through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR SO₂ allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in any CAIR permit of the source.

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(f) Excess emissions requirements.

(1) If a CAIR NO_x Annual source emits nitrogen oxides during any control period in excess of the CAIR NO_x Annual emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_x Annual unit at the source shall surrender the CAIR NO_x Annual allowances required for deduction under 45CSR§39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(2) If a CAIR NO_x Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO_x Ozone Season emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 45CSR§40-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(3) If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then:

(i) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 45CSR§41-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(g) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the Administrator.

(i) The certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(h) Liability.

(1) Each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each NO_x unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) of the CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_x Annual units, CAIR NO_x Ozone Season units or CAIR SO₂ units (as applicable) at the source.

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual unit, CAIR SO₂ unit or CAIR NO_x Ozone Season unit (as applicable) of the CAIR designated representative of a CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit or CAIR SO₂ unit (as applicable) shall also apply to the owners and operators of such unit.

(i) Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) or CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

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Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

CAIR Designated Representative John M. McManus	
Signature <i>John M. McManus</i>	Date <i>5/25/07</i>

Transport Rule (TR) Trading Program Title V Requirements

Plant Name: Mitchell Plant	West Virginia ID Number: 051-00005	ORIS/Facility Code: 3948
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The TR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following table(s). These unit(s) are subject to the requirements for the *TR NO_x Annual Trading Program*, *TR NO_x Ozone Season Trading Program*, and the *TR SO₂ Group 1 Trading Program*.

Unit ID: Unit 1, Unit 2					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO ₂ monitoring) and 40 CFR part 75, subpart H (for NO _x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO ₂	X		-----		
NO _x	X	-----			
Heat input	X		-----		

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435, (*TR NO_x Annual Trading Program*), 97.530 through 97.535 (*TR NO_x Ozone Season Trading Program*) and, 97.630 through 97.635 (*TR SO₂ Group 1 Trading Program*). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <http://www.epa.gov/airmarkets/emissions/monitoringplans.html>.
3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (*TR NO_x Annual Trading Program*), 97.535 (*TR NO_x Ozone Season Trading Program*) and/or, 97.635 (*TR SO₂ Group 1 Trading Program*). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <http://www.epa.gov/airmarkets/emissions/petitions.html>.
4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (*TR NO_x Annual Trading Program*), 97.530 through 97.534 (*TR NO_x Ozone Season Trading Program*) and/or, 97.630 through 97.634 (*TR SO₂ Group 1 Trading Program*) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (*TR NO_x Annual Trading Program*), 97.535 (*TR NO_x Ozone Season Trading Program*) and/or 97.635 (*TR SO₂ Group 1 Trading Program*). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at <http://www.epa.gov/airmarkets/emissions/petitions.html>.
5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (*TR NO_x Annual Trading Program*), 97.530 through 97.534 (*TR NO_x Ozone Season Trading Program*) and/or, 97.630 through 97.634 (*TR SO₂ Group 1 Trading Program*), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

TR NO_x Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

- (1) TR NO_x Annual emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall hold, in the source's compliance account, TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all TR NO_x Annual units at the source.
 - (ii). If total NO_x emissions during a control period in a given year from the TR NO_x Annual units at a TR NO_x Annual source are in excess of the TR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR NO_x Annual unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - (B). The owners and operators of the source and each TR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- (2) TR NO_x Annual assurance provisions.
 - (i). If total NO_x emissions during a control period in a given year from all TR NO_x Annual units at TR NO_x Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total

- NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR NO_x Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
 - (iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Annual units at TR NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold TR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each TR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- (3) Compliance periods.
- (i). A TR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
 - (ii). A TR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i). A TR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.
- (6) Limited authorization. A TR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i). Such authorization shall only be used in accordance with the TR NO_x Annual Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO_x Annual allowance does not constitute a property right.
- (d) Title V permit revision requirements.**
- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_x Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.

- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
- (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_x Annual Trading Program.
- (2) The designated representative of a TR NO_x Annual source and each TR NO_x Annual unit at the source shall make all submissions required under the TR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

- (1) Any provision of the TR NO_x Annual Trading Program that applies to a TR NO_x Annual source or the designated representative of a TR NO_x Annual source shall also apply to the owners and operators of such source and of the TR NO_x Annual units at the source.
- (2) Any provision of the TR NO_x Annual Trading Program that applies to a TR NO_x Annual unit or the designated representative of a TR NO_x Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR NO_x Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Annual source or TR NO_x Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

TR NO_x Ozone Season Trading Program Requirements (40 CFR 97.506)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_x Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_x Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

- (1) TR NO_x Ozone Season emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_x emissions for such control period from all TR NO_x Ozone Season units at the source.
 - (ii). If total NO_x emissions during a control period in a given year from the TR NO_x Ozone Season units at a TR NO_x Ozone Season source are in excess of the TR NO_x Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Ozone Season allowances required for deduction under 40 CFR 97.524(d); and
 - (B). The owners and operators of the source and each TR NO_x Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBBB and the Clean Air Act.
- (2) TR NO_x Ozone Season assurance provisions.
 - (i). If total NO_x emissions during a control period in a given year from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state

- for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
- (B). The amount by which total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR NO_x Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
 - (iv). It shall not be a violation of 40 CFR part 97, subpart BBBBBB or of the Clean Air Act if total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold TR NO_x Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each TR NO_x Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBBB and the Clean Air Act.
- (3) Compliance periods.
- (i). A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
 - (ii). A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i). A TR NO_x Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_x Ozone Season allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR NO_x Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_x Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO_x Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBBB.
- (6) Limited authorization. A TR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i). Such authorization shall only be used in accordance with the TR NO_x Ozone Season Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart BBBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO_x Ozone Season allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_x Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_x Ozone Season Trading Program.
- (2) The designated representative of a TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall make all submissions required under the TR NO_x Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

- (1) Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season source or the designated representative of a TR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_x Ozone Season units at the source.
- (2) Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season unit or the designated representative of a TR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR NO_x Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Ozone Season source or TR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

TR SO₂ Group 1 Trading Program requirements (40 CFR 97.606)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO₂ emissions requirements.

- (1) TR SO₂ Group 1 emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all TR SO₂ Group 1 units at the source.
 - (ii). If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (B). The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (2) TR SO₂ Group 1 assurance provisions.
 - (i). If total SO₂ emissions during a control period in a given year from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and

- (B). The amount by which total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each TR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (3) Compliance periods.
 - (i). A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
 - (ii). A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
 - (i). A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.
- (6) Limited authorization. A TR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (i). Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR SO₂ Group 1 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO₂ Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO₂ Group 1 Trading Program.
- (2) The designated representative of a TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall make all submissions required under the TR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

- (1) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 source or the designated representative of a TR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the TR SO₂ Group 1 units at the source.
- (2) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 unit or the designated representative of a TR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO₂ Group 1 source or TR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

APPENDIX F

Class II General Permit G60-C