

West Virginia Department of Environmental Protection  
*Division of Air Quality*

*Joe Manchin, III*  
Governor

*Randy C. Huffman*  
Cabinet Secretary

# Permit to Operate



*Pursuant to*  
**Title V**  
of the Clean Air Act

*Issued to:*  
Allegheny Energy Supply Company, LLC  
Harrison Power Station  
R30-03300015-2009

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*John A. Benedict*  
Director

*Issued: January 26, 2009 • Effective: February 9, 2009*  
*Expiration: January 26, 2014 • Renewal Application Due: July 26, 2013*

Permit Number: **R30-03300015-2009**  
Permittee: Allegheny Energy Supply Company, LLC  
Facility Name: Harrison Power Station  
Permittee Mailing Address: 800 Cabin Hill Drive, Greensburg, PA 15601

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*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.*

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Facility Location:	Haywood, Harrison County, West Virginia
Facility Mailing Address:	800 Cabin Hill Drive, Greensburg, PA 15601
Telephone Number:	304-584-2348
Type of Business Entity:	Limited Liability Company
Facility Description:	Electric Generating Service
SIC Codes:	4911
UTM Coordinates:	557.392 Easting • 4359.489 Northing • Zone 17

Permit Writer: Mike Egnor

*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.*

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*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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## 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/Modified	Design Capacity	Control Device
<b>Combustion Sources</b>					
Unit B1	Stack1	Harrison Unit 1	1972	6325 MMBtu/hr	ESP-1, FGD-1, SCR-1
Unit B2	Stack2	Harrison Unit 2	1973	6325 MMBtu/hr	ESP-2, FGD-2, SCR-2
Unit B3	Stack3	Harrison Unit 2	1974	6325 MMBtu/hr	ESP-3, FGD-3, SCR-3
Boiler 1A	Aux Boiler Stack	Auxiliary Boiler A	1972	202.2 MMBtu/hr	N/A
Aux Blr PB	Aux Boiler Stack	Auxiliary Boiler B	1972	202.2 MMBtu/hr	N/A
EDG1	EDG1	Emergency Generator No. 1	1971	800 kW	N/A
EDG2	EDG2	Emergency Generator No. 2	1971	800 kW	N/A
EDG3	EDG3	Emergency Generator No. 3	1994	350 kW	N/A
<b>Control Devices</b>					
ESP-1	ESP-1	Dry Plate Electrostatic Precipitator	1972	2.26x10 <sup>6</sup> ACFM	FGD-1
ESP-2	ESP-2	Dry Plate Electrostatic Precipitator	1973	2.26x10 <sup>6</sup> ACFM	FGD-2
ESP-3	ESP-3	Dry Plate Electrostatic Precipitator	1974	2.26x10 <sup>6</sup> ACFM	FGD-3
FGD-1	FGD-1	Wet Scrubbing System for Stack1 (105,000 gpm)	1994	2.26x10 <sup>6</sup> ACFM	SCR-1
FGD-2	FGD-2	Wet Scrubbing System for Stack2 (105,000 gpm)	1995	2.26x10 <sup>6</sup> ACFM	SCR-2
FGD-3	FGD-3	Wet Scrubbing System for Stack3 (105,000 gpm)	1995	2.26x10 <sup>6</sup> ACFM	SCR-3
SCR-1	SCR-1	Selective Catalytic Reduction	2003	2.26x10 <sup>6</sup> ACFM	N/A
SCR-2	SCR-2	Selective Catalytic Reduction	2003	2.26x10 <sup>6</sup> ACFM	N/A
SCR-3	SCR-3	Selective Catalytic Reduction	2003	2.26x10 <sup>6</sup> ACFM	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device
<b>Material Handling Sources</b>					
LRCH	LRCH	Lime Rail Car Unloading Hoppers	1994	380 TPH	6ca, 6cb, 6cc, 6cd
6si, 6sj	6si, 6sj	Lime Unloading Conveyor and Transfer Points	1994	450 TPH	6ca, 6cb, 6cc
8sa, 8sb, 8sg, 8sh	8sa, 8sb, 8sg, 8sh	Lime Transfer and Storage Conveyors with Associated Dribble Conveyors	1994	450 TPH (Trans.) 900 TPH (Stor.)	8c
13	13	Lime Storage Silo	1994	101,788 Tons	9c
14	14	Lime Storage Silo	1994	101,788 Tons	10c
11va, 12va	11va, 12va	Emergency Lime Pneumatic Delivery Conveyor (from trucks)	1994	75 Tons (each)	Full Enclosure
37	37	Emergency Lime Storage Silo	1994	150 Tons	11c
38	38	Emergency Lime Storage Silo	1994	150 Tons	12c
9va, 10va	9va, 10va	Emergency Lime Pneumatic Conveyor (from Emergency Lime to Lime Storage Silos)	1994	627,546 TPY	Full Enclosure
24v, 25v, 26v, 27v	24v, 25v, 26v, 27v	Ball-Mill Delivery Screw Conveyors	1994	30 TPH	Full Enclosure
24s, 25s, 26s, 27s	24s, 25s, 26s, 27s	Ball-Mill Slakers	1994	30 TPH	24c, 25c, 26c, 27c
15va, 16va, 17va	15va, 16va, 17va	Solid Waste Processing Lime Silo (SWPLS) Loading Pneumatic Conveyors from Lime Crushers	1994	25 TPH	Full Enclosure
15vb, 16vb, 17vb	15vb, 16vb, 17vb	Solid Waste Processing Lime Silo (SWPLS) Loading Pneumatic Conveyors from trucks	1994	25 TPH	Full Enclosure
33	33	Solid Waste Processing Lime Silo	1994	388 Tons	15c
34	34	Solid Waste Processing Lime Silo	1994	388 Tons	16c
35	35	Solid Waste Processing Lime Silo	1994	388 Tons	17c
18va, 19va, 20va	18va, 19va, 20va	Solid Waste Processing Fly Ash Silo (SWPFAS) Loading Pneumatic Conveyors from Fly Ash Silos	1994	120 TPH	Full Enclosure
18vb, 19vb, 20vb	18vb, 19vb, 20vb	Solid Waste Processing Fly Ash Silo (SWPFAS) Loading Pneumatic Conveyors from trucks	1994	120 TPH	Full Enclosure
21	21	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	18c
22	22	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	19c
23	23	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	20c

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
21va, 22va, 23va	21va, 22va, 23va	Solid Waste Processing Fly Ash Screw Conveyors	1994	70 TPH	Full Enclosure
21vb, 22vb, 23vb	21vb, 22vb, 23vb	Solid Waste Processing Lime Screw Conveyors	1994	10 TPH	Full Enclosure
21vc, 22vc, 23vc	21vc, 22vc, 23vc	Solid Waste Processing Lime/Fly Ash Screw Conveyors	1994	80 TPH	Full Enclosure
21vd, 22vd, 23vd	21vd, 22vd, 23vd	Solid Waste Processing Lime/Fly Ash Screw Conveyors	1994	80 TPH	Full Enclosure
37v, 38v	37v, 38v	Centrifuge Cake Screw Conveyors	1994	150 TPH	Full Enclosure
21s	21s	Solid Waste Processing Pug Mill	1994	600 TPH	21c
22s	22s	Solid Waste Processing Pug Mill	1994	600 TPH	22c
23s	23s	Solid Waste Processing Pug Mill	1994	600 TPH	23c
RCCD	RCCD	Rail Car Coal Dumpers	1971	1500 TPH	Water Spray
ST-1	ST-1	Coal Stockpile	1971	1,000,000 Tons	Water Spray
ST-2	ST-2	Ash Disposal Areas	1971	64,320,000 Tons	Water Spray
BH Conv	BH Conv	Boiler House Conveyors (S-1a/b, S-2a/b, S-3a/b, C-5a/b, C-6a/b)	1971	1500 TPH	Partial Enclosure
C-12	C-12	Conveyor from Surge Bin to Lowering Well #2	1971	1500 TPH	Partial Enclosure
C-1	C-1	Conveyor from Crusher House to Lowering Well #2	1971	1500 TPH	Partial Enclosure
C-3a/b	C-3a/b	Conveyor From Coal Reclaim to Crusher House Transfer Bin	1971	1500 TPH	Partial Enclosure
C-4a/b	C-4a/b	Conveyor From Crusher House to Boiler House Conveyors	1971	1500 TPH	Partial Enclosure
RC-7	RC-7	Conveyor From Rail Dumper to RC-8	1971	1500 TPH	Partial Enclosure
RC-8	RC-8	Conveyor From RC-7 to Crusher House	1971	1500 TPH	Partial Enclosure
MC-7	MC-7	Conveyor From Mine to Crusher House	1971	1500 TPH	Partial Enclosure
C-2b	C-2b	Conveyor From Chute to Lowering Well #1	1971	800 TPH	Partial Enclosure
C-10	C-10	Internal Crusher House Conveyor to Surge Bin	1971	1500 TPH	Partial Enclosure

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
C-11	C-11	Internal Crusher House Conveyor from Surge Bin	1979	1500 TPH	Partial Enclosure
CRU-01	CRU-01	Coal Crusher	1971	1500 TPH	Full Enclosure, Water Spray
CRU-02	CRU-02	Coal Crusher	1972	1500 TPH	Full Enclosure, Water Spray
CRU-03	CRU-03	Coal Crusher	1977	1500 TPH	Full Enclosure, Water Spray
UR-1	UR-1	Urea Storage Silos (4)	2003	25 TPH (each)	28c, 29c, 30c, 31c
UR-2	UR-2	Urea Feed Hoppers (2)	2003	16 TPH (each)	32c, 33c
<b>Control Devices</b>					
6ca, 6cb, 6cc	6ca, 6cb, 6cc	Fabric Filter Baghouse	1994	175,000 CFM	N/A
6cd	6cd	Vacuum System	1994	947 CFM	N/A
8c	8c	Fabric Filter Baghouse	1994	28,000 CFM	N/A
9c	9c	Fabric Filter Baghouse	1994	10,000 CFM	N/A
10c	10c	Fabric Filter Baghouse	1994	10,000 CFM	N/A
11c	11c	Fabric Filter Baghouse	1994	2,100 CFM	N/A
12c	12c	Fabric Filter Baghouse	1994	2,100 CFM	N/A
13c	13c	Fabric Filter Baghouse	1994	600 CFM	N/A
14c	14c	Fabric Filter Baghouse	1994	600 CFM	N/A
15c	15c	Fabric Filter Baghouse	1994	2,700 CFM	N/A
16c	16c	Fabric Filter Baghouse	1994	2,700 CFM	N/A
17c	17c	Fabric Filter Baghouse	1994	2,700 CFM	N/A
18c	18c	Fabric Filter Baghouse	1994	6,400 CFM	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
19c	19c	Fabric Filter Baghouse	1994	6,400 CFM	N/A
20c	20c	Fabric Filter Baghouse	1994	6,400 CFM	N/A
21c	21c	Wet Scrubber	1994	2,000 CFM	N/A
22c	22c	Wet Scrubber	1994	2,000 CFM	N/A
23c	23c	Wet Scrubber	1994	2,000 CFM	N/A
24c	24c	Wet Scrubber	1994	1,000 CFM	N/A
25c	25c	Wet Scrubber	1994	1,000 CFM	N/A
26c	26c	Wet Scrubber	1994	1,000 CFM	N/A
27c	27c	Wet Scrubber	1994	1,000 CFM	N/A
28c	28c	Fabric Filter Baghouse	1994	655 CFM	N/A
29c	29c	Fabric Filter Baghouse	1994	655 CFM	N/A
30c	30c	Fabric Filter Baghouse	1994	655 CFM	N/A
31c	31c	Fabric Filter Baghouse	1994	655 CFM	N/A
32c	32c	Fabric Filter Baghouse	1994	655 CFM	N/A
33c	33c	Fabric Filter Baghouse	1994	655 CFM	N/A
34c	34c	Fabric Filter Baghouse	1994	655 CFM	N/A
35c	35c	Fabric Filter Baghouse	1994	655 CFM	N/A
36c	36c	Fabric Filter Baghouse	1994	655 CFM	N/A
<b>Miscellaneous Sources</b>					
COOL-01	Cooling Towers (2)	Natural Draft Cooling Towers (2)	1971	585,000 gpm	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
PVR	Paved Roads	Plant Paved Roads	N/A	N/A	N/A
UPVR	Unpaved Roads	Plant Unpaved Roads	N/A	N/A	N/A
U2HN	U2HN	Underground Gasoline Storage Tank	1990	2000 gallons	N/A
WASTE-WATER	Harrison Wastewater Operations	Harrison Wastewater Treatment Operations (Insignificant Activity)	N/A	6,084.55 MMgal/year	N/A
A53HN	A53HN	Dozer Fuel Oil Storage Tank	1990	12,000 gallons	N/A
Insig Tanks	N/A	Insignificant Storage Tanks (Insignificant Activity)	N/A	N/A	N/A

## 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
R13-1477B	6/3/2003

## 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 data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

### 2.2 Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CBI</b>	Confidential Business Information	<b>NSPS</b>	New Source Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>pph</b>	Pounds per Hour
<b>CO</b>	Carbon Monoxide	<b>ppm</b>	Parts per Million
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>PSD</b>	Prevention of Significant Deterioration
<b>DAQ</b>	Division of Air Quality	<b>psi</b>	Pounds per Square Inch
<b>DEP</b>	Department of Environmental Protection	<b>SIC</b>	Standard Industrial Classification
<b>FOIA</b>	Freedom of Information Act	<b>SIP</b>	State Implementation Plan
<b>HAP</b>	Hazardous Air Pollutant	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>HON</b>	Hazardous Organic NESHAP	<b>TAP</b>	Toxic Air Pollutant
<b>HP</b>	Horsepower	<b>TPY</b>	Tons per Year
<b>lbs/hr or lb/hr</b>	Pounds per Hour	<b>TRS</b>	Total Reduced Sulfur
<b>LDAR</b>	Leak Detection and Repair	<b>TSP</b>	Total Suspended Particulate
<b>m</b>	Thousand	<b>USEPA</b>	United States Environmental Protection Agency
<b>MACT</b>	Maximum Achievable Control Technology	<b>UTM</b>	Universal Transverse Mercator
<b>mm</b>	Million	<b>VEE</b>	Visual Emissions Evaluation
<b>mmBtu/hr</b>	Million British Thermal Units per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>mmft<sup>3</sup>/hr or mmcf/hr</b>	Million Cubic Feet Burned per Hour		
<b>NA or N/A</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		

### **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 45CSR15]
- 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:
- 3.1.8.
- 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]

3.1.9. **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]**

3.1.10. **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.

**[45CSR§2-5.1.]**

3.1.11. **NO<sub>x</sub> Budget Trading Program.** The permittee shall comply with the standard requirements set forth in the attached NO<sub>x</sub> Budget Permit Application (see Appendix A) and the NO<sub>x</sub> Budget Permit requirements set forth in 45CSR26 for each NO<sub>x</sub> budget source. The complete NO<sub>x</sub> Budget Permit Application shall be the NO<sub>x</sub> Budget Permit portion of the Title V permit administered in accordance with 45CSR30.

**[45CSR§§26-6.1.b. and 20.1.]**

a. The NO<sub>x</sub> Budget portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§26-2 and, upon recordation by the Administrator under 45CSR§26-50 through 45CSR§26-57 or 45CSR§26-60 through 45CSR§26-62, every allocation, transfer or deduction of a NO<sub>x</sub> allowance to or from the compliance accounts of the NO<sub>x</sub> Budget units covered by the permit or the overdraft account of the NO<sub>x</sub> budget source covered by the permit.

**[45CSR§26-23.2.]**

b. Except as provided in 45CSR§26-23.2, the Secretary will revise the NO<sub>x</sub> Budget portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.

**[45CSR§26-24.1.]**

3.1.12. **CAMR Mercury Budget Trading Program.** The permittee shall comply with the standard requirements set forth in an Hg Budget Permit Application and the Hg Budget Permit requirements set forth in 45CSR37 for each Hg Budget source. The complete Hg Budget Permit Application shall be the CAMR Permit portion of the Title V permit administered in accordance with 45CSR30.

**[45CSR§§37-6.1.b. and 20.1. State-Enforceable only.]**

a. The CAMR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§37-2 and, upon recordation by the Administrator under sections 51 through 57, 60 through 62 of 45CSR37, every allocation, transfer or deduction of a Hg allowance to or from the compliance account of the Hg Budget source covered by the permit.

**[45CSR§37-23.2. State-Enforceable only.]**

- b. Except as provided in 45CSR§37-23.2, the Secretary will revise the CAMR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.  
**[45CSR§37-24.1. State-Enforceable only.]**

- 3.1.12. **CAIR NO<sub>x</sub> Annual Trading Program.** 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<sub>x</sub> 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<sub>x</sub> Annual allowance to or from the compliance account of the CAIR NO<sub>x</sub> 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.]**

In July 2008, CAIR was vacated by the U.S. Court of Appeals for the District of Columbia. At this time however, the vacature of CAIR is stayed and no mandate has been issued making the vacature effective. Should the court issue a mandate vacating CAIR, this requirement will be unenforceable.

- 3.1.13. **CAIR NO<sub>x</sub> Ozone Season Trading Program.** 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<sub>x</sub> 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 45CSR§40-43.3.c, sections 51 through 57, or 60 through 62 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from the compliance account of the CAIR NO<sub>x</sub> 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.]**

In July 2008, CAIR was vacated by the U.S. Court of Appeals for the District of Columbia. At this time however, the vacature of CAIR is stayed and no mandate has been issued making the vacature effective. Should the court issue a mandate vacating CAIR, this requirement will be unenforceable.

- 3.1.14. **CAIR SO<sub>2</sub> Trading Program.** 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 SO<sub>2</sub> 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 SO<sub>2</sub> allowance to or from the compliance account of the CAIR SO<sub>2</sub> 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.]

In July 2008, CAIR was vacated by the U.S. Court of Appeals for the District of Columbia. At this time however, the vacature of CAIR is stayed and no mandate has been issued making the vacature effective. Should the court issue a mandate vacating CAIR, this requirement will be unenforceable.

### 3.2. Monitoring Requirements

N/A

### 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.

[WV Code § 22-5-4(a)(15) and 45CSR13]

### 3.4. Recordkeeping Requirements

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

[45CSR§30-5.1.c.2.A.]

- 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 and maintained in conformance with their designs. 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.]

### 3.5. 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. 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 57<sup>th</sup> Street SE  
Charleston, WV 25304  
  
Phone: 304/926-0475  
FAX: 304/926-0478

**If to the US EPA:**

Associate Director  
Office of Enforcement and Permits Review  
(3AP12)  
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 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**

N/A

**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.

The tanks (except for tank A53HN) listed in Section 1.0 (Emission Units) do not have any applicable requirements.

#### **4.0 Source-Specific Requirements [Boiler #1 (Stack1), Boiler #2 (Stack2), Boiler #3 (Stack3), Auxiliary Boiler 1A (Aux Boiler Stack 1A), Auxiliary Boiler PB (Aux Boiler Stack PB)]**

##### 4.0.1. Emergency Operating Scenarios

In the event of an unavoidable shortage of fuel having characteristics or specifications necessary to comply with the visible emission standard set forth in permit condition 4.1.1. of this permit, 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 standards under permit Condition 4.1.3 of this permit, will not be exceeded during the exemption period.

[45CSR§2-10.1.]

#### **4.1. Limitations and Standards**

##### Particulate Matter

4.1.1. Emissions of smoke and/or particulate matter from each stack shall not exceed ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.]

4.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 (Condition 4.1.1 of this permit) shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and as described in the approved monitoring plan. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

Method 9 testing for the Boilers *Aux Boiler Stack 1A* and *Aux Boiler Stack PB* shall not be required if the Permittee does not burn oil in these Boilers during the calendar month. However, the permittee must keep records of hours of operation of the boilers as well as records of fuel usage for these boilers during months that oil is not burned as fuel.

[45CSR§§2-3.2 and 8.4.b, 45CSR§2A-6, 45CSR§2-8.3.c.]

4.1.3. Particulate matter emissions from each stack (Stack1, Stack2, and Stack3) shall not exceed 316.25 lb/hr.

[45CSR§2-4.1.a.]

4.1.4. Particulate matter emissions from each auxiliary boiler stack (Aux Boiler Stack 1A, Aux Boiler Stack PB) shall not exceed 36.40 lb/hr.

[45CSR§2-4.1.b.]

4.1.5. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment is prohibited unless written approval for such addition is provided by the Secretary.

[45CSR§2-4.4.]

4.1.6. Compliance with the visible emission limit shall be demonstrated by periodic testing in accordance with 40 CFR Part 60, Appendix A, Method 9, or a certified continuous opacity monitoring system, as approved by the Secretary. Compliance with the weight emission limit shall be demonstrated by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in the Appendix to 45CSR2 or other

equivalent EPA approved method approved by the Secretary. Such testing shall be conducted at a frequency to be established by the Secretary.

**[45CSR§2-8.1.a.]**

Note : An alternative monitoring method has been granted in the attached approved Monitoring Plan.

- 4.1.7. Compliance with the visible emissions limit shall be monitored as set forth in the approved monitoring plan (attached in Appendix B) for each emission unit.

**[45CSR§2-8.2.a.]**

- 4.1.8. Records of monitored data established in the monitoring plan 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.]**

- 4.1.9. A periodic exception report shall be submitted to the Secretary, in a manner and at a frequency to be established by the Secretary. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

**[45CSR§2-8.3.b, 45CSR2A]**

- 4.1.10. 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.]**

- 4.1.11. The visible emission standards of condition 4.1.1 shall apply at all times except in periods of start-ups, shutdowns and malfunctions.

**[45CSR§2-9.1.]**

- 4.1.12. 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, 45CSR16]**

- 4.1.13. As long as Flue Gas Desulfurization system (Scrubber) is operating Harrison is allowed to burn unwashed coal **with a maximum ash content of 16%**. When the scrubber is not operating ash content of the fuel will be approximately 8.5%.

**[Consent order dated July, 1978; 45CSR§30-12.7; State Enforceable Only]**

Nitrogen Oxides (NO<sub>2</sub>)

- 4.1.14. Nitrogen oxides emissions from *Stack1*, *Stack2* & *Stack3* shall not exceed NO<sub>x</sub> limits specified in the Acid Rain Permit (Appendix C).

**[45CSR33]**

Sulfur Dioxide (SO<sub>2</sub>)

- 4.1.15. Sulfur dioxide emissions from each stack (*Stack1*, *Stack2* & *Stack3*) shall not exceed 32,384 lb/hr.

**[45CSR§10-3.3.a.]**

- 4.1.16. Sulfur dioxide emissions from each auxiliary stack (*Aux Boiler Stack IA* and *Aux Boiler Stack PB*) shall not exceed 1,294.08 lb/hr.  
**[45CSR§10-3.1.e.]**
- 4.1.17. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units 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.] (*Stack1, Stack2 & Stack3*)**

#### Acid Rain Program

- 4.1.18. Unit B1, Unit B2, and Unit B3 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 CFR §§ 72, 73, 74, 75, 76, 77 and 78. These requirements include, but are not limited to:
- a. Hold an Acid Rain permit (Acid Rain Permit is included in Appendix C);
  - 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 CFR 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 CFR 72, Subpart I and 40 CFR 75.

**[45CSR33, 40CFR Parts 72, 73, 74, 75, 76, 77, 78.]**

## **4.2. Monitoring Requirements**

- 4.2.1. Compliance with the visible emission requirements for *Stack1, Stack2 & Stack3, Aux Boiler Stack IA, and Aux Boiler Stack PB* shall be determined as outlined in section I.A. of the *Revision 2 "Monitoring and Recordkeeping Plan 45CSR2 and 45CSR10"* submitted on September 25, 2002 and which is attached in Appendix B of this permit. (Monitoring Plan Approval Date –8-6-03)

Method 9 testing for *Aux Boiler Stack IA* and *Aux Boiler Stack PB* shall not be required if the Permittee does not burn oil in these Boilers during the calendar month. However, the permittee must keep records of hours of operation of the boilers as well as records of fuel usage fuel for these boilers during months that oil is not burned as fuel.

**[45CSR§§2-3.2, 8.2, and 8.4.b.]**

- 4.2.2. The Electrostatic Precipitator (ESP) secondary voltage and secondary current shall be measured continuously using a voltmeter and ammeter integrated into the ESP Unit, and both shall be recorded no less than four times per hour, equally spaced over each hour. The total power (P) input to the ESP is the sum of the products of

secondary voltage (V) and current (I) in each field and shall be calculated and recorded in accordance with Condition 4.4.3 of this permit.

**[45CSR§30-5.1.c., 40 C.F.R. § 64.3(b)(1), and 40 C.F.R. § 64.3(b)(4)(ii)]**

- 4.2.3. The permittee shall calibrate, maintain, and operate the instrumentation used to measure the secondary voltage and secondary current in Condition 4.2.2 of this permit in accordance with manufacturer's specifications.  
**[45CSR§30-5.1.c. and 40 C.F.R. § 64.3(b)(3)]**
- 4.2.4. The owner or operator shall install, calibrate, certify, operate, and maintain continuous monitoring systems that measure all SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> emissions from each stack liner, *Stack1*, *Stack2*, and *Stack3* as specified in 40 C.F.R. Part 60, Subpart D and in 40 C.F.R. Part 75.  
**[45CSR16, 45CSR33, 40 C.F.R. § 75.10, 40 C.F.R. § 60.45]**
- 4.2.5. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units 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 Condition 4.1.15 and 4.1.16 of this permit, 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.]**
- 4.2.6. The CAM related testing and CAM plan implementation shall be conducted according to the following schedule:
1. Allegheny Energy shall submit a CAM testing protocol to the Department and to US EPA 30 days prior to CAM testing.
  2. Allegheny Energy shall complete the CAM testing within 120 days of the issuance of this permit.
  3. Testing results, including the excursion limits, and the generated ESP power to particulate matter correlation curve shall be submitted to the Department within 45 days after completion of testing.
  4. Within 180 of issuance of this Permit, Allegheny Energy shall begin implementation of the CAM plan.  
**[45CSR§30-5.1.c. and 40 C.F.R. § 64.4(e)]**

### **4.3. Testing Requirements**

- 4.3.1. The owner or operator shall conduct, or have conducted, tests to determine the compliance of Unit B1, Unit B2 and Unit B3 with the particulate matter weight emission standards (in lbs/hr). 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. Each of the three units have had test results greater than 80% without three successive tests less than 80%. Therefore, the next test for Unit B1 shall be on or before February 1, 2009. The next test for Unit B2 shall be performed on or before November 7, 2009. The next test for Unit B3 shall be performed on or before November 19, 2009.

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

[45CSR§2-8.1., 45CSR§2A-5.2.]

#### 4.4. Recordkeeping Requirements

4.4.1. The owner or operator of a fuel burning unit(s) shall maintain on-site all records of monitored data established in the monitoring plan pursuant to Condition 4.2.1 of this permit. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.

[45CSR§2-8.3.a.]

4.4.2. The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit as outlined in “45CSR2 Monitoring Plan” attached as Appendix B of this permit. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.c.]

4.4.3. The total secondary Electrostatic Precipitator power input (in kW) shall be calculated and recorded no less than four times per hour, equally spaced over each hour, in an electronic data acquisition system and averaged on a 3 hour basis.

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

#### **4.5. Reporting Requirements**

4.5.1. The designated representative shall electronically report SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> 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. Compliance with the periodic exception reporting of permit condition 4.1.9 shall be demonstrated as outlined in “45CSR2 Monitoring Plan” attached as Appendix B of this permit.

**[45CSR§2-8.3.b.]**

4.5.3. The owner or operator of a fuel burning unit(s) subject to this rule shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e., emissions exceeding the standards in section 45CSR§2-3 and 45CSR§2-4) as provided in one of the following subdivisions:

4.5.3.1. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

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

Excess opacity does not exceed 40%.

4.5.3.2. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in subdivision 45CSR§2-9.3.a (Section 4.5.3.1 of this permit), by telephone, telefax, or e-mail 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 Director within thirty (30) days providing the following information:

A detailed explanation of the factors involved or causes of the malfunction;

The date and time of duration (with starting and ending times) of the period of excess emissions;

An estimate of the mass of excess emissions discharged during the malfunction period;

The maximum opacity measured or observed during the malfunction;

Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

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.]**

#### **4.6. Compliance Plan**

N/A

## 5.0 Source-Specific Requirements [Lime Handling Facilities]

### 5.1. Limitations and Standards

5.1.1. In accordance with the information filed in Permit Application R13-1477A, R13-1477B and any amendments thereto, the maximum throughputs in Section 1.0 shall not be exceeded, and, at a minimum, the control equipment specified in Section 1.0 shall be installed, maintained, and operated so as to minimize particulate matter emissions.

**[45CSR13, R13-1477 (Condition A.1.)]**

5.1.2. In accordance with the information filed in Permit Application R13-1477A, R13-1477B, and any amendments thereto, particulate matter (PM) emissions from the following emission points shall not exceed the following limitations and the maximum exit gas flows from the associated control devices shall not be exceeded:

Control Device Identification Number	Control Device Type	Emission Point Identification Number	gr/acf <sup>(1)</sup>	Maximum Air Flow (acfm) <sup>(2)</sup>
6ca,6cb,6cd	Baghouses	6e <sup>(3)</sup>	0.009	175000
8c	Baghouse	8e	0.003	28000
9c	Baghouse	9e	0.003	10000
10c	Baghouse	10e	0.003	10000
11c	Baghouse	11e	0.003	2100
12c	Baghouse	12e	0.003	2100
13c	Baghouse	13e	0.003	600
14c	Baghouse	14e	0.003	600
15c	Baghouse	15e	0.003	2700
16c	Baghouse	16e	0.003	2700
17c	Baghouse	17e	0.003	2700
18c	Baghouse	18e	0.003	6400
19c	Baghouse	19e	0.003	6400
20c	Baghouse	20e	0.003	6400
21c	Wet Collector	21e	0.030	2000
22c	Wet Collector	22e	0.030	2000
23c	Wet Collector	23e	0.030	2000
24c	Wet Collector	24e	0.009	1000
25c	Wet Collector	25e	0.009	1000
26c	Wet Collector	26e	0.009	1000
27c	Wet Collector	27e	0.009	1000
28c	Baghouse	28e	0.015	335

- (1) gr/acf = grains per actual cubic foot of exit gas. These limits are considered instantaneous limits.
- (2) Compliance with the maximum air flow will be based on the maximum rated capacity of all blowers feeding the emission point.
- (3) The emission limit listed is the aggregate limit for the emission point. It is not the limit for each individual baghouse but rather the aggregate limit for all three.

**[45CSR13, R13-1477 (Condition A.2.)]**

5.1.3. In accordance with the information filed in Permit Application R13-1477A, R13-1477B, and any amendments thereto, the following materials and hours of operation shall be limited to the quantities as specified below. All annual limits are calculated using a rolling yearly total. A rolling yearly total shall mean the sum of the material throughput at any given time for the previous twelve (12) months.

- a. The input of lime into the lime handling system shall not exceed 627,546 TPY.
- b. The combined amount of bottom ash transported to the landfill area (and then possibly sized and sent offsite) and the bottom ash transported directly offsite shall not exceed 192,000 TPY.
- c. The amount of fly ash, as generated by the Harrison Power Station, to be transported to the landfill ( $FA_{LF}$ ) shall not exceed the amount as calculated in the following equation:

$$FA_{LF} \text{ (TPY)} = 256,000 + ((250,000 - FA_{OS}) * 0.48)$$

Where,

$FA_{OS}$  = Amount of Fly-Ash disposed of from off-site sources.

The maximum amount of fly ash to be disposed of in the landfill shall not exceed 376,000 TPY from the Harrison Power Station and 506,000 TPY total from both Harrison Power Station and offsite sources.

- d. The amount of flue gas desulfurization (FGD) sludge to be disposed of either in the landfill or offsite shall not exceed 3,000,000 TPY.
- e. Landfill fly ash surface bulldozing shall be limited to 160 hours per year.
- f. Lime unloading operations shall be limited to 2,920 hours per year.

**[45CSR13, R13-1477 (Condition A.3)]**

5.1.4. Fugitive dust control measures for haulroads shall be utilized and maintained in such a manner as to minimize dust generation and atmospheric entrainment. Those measures shall include a continuous program of watering haulroad(s) and by wet-vacuum sweeping of paved haulroads at all times haulage trucks are in operation unless such haulroads are adequately wetted by natural rainfall.

- a. Water truck to be utilized shall be equipped with manufactured-type spray nozzles which are pressurized per manufacturer's recommended guidelines for controlling fugitive dust emissions.
- b. Vacuum sweeper shall be of the type that utilizes wet vacuuming and filtration prior to exhausting air.
- a. A maximum speed limit of 15 miles per hour shall be maintained on all unpaved roads. A clear and visible sign shall be posted at the beginning of all unpaved roads clearly displaying this speed limit.

**[45CSR13, R13-1477 (Condition A.4)]**

5.1.5. Stabilized sludge shall be maintained at a minimum of 30% moisture, by weight, prior to final deposition at any landfill.

**[45CSR13, R13-1477 (Condition A.5)]**

5.1.6. The operation of this facility is subject to requirements of 45CSR7. Pertinent sections applying to this operation include, but are not limited to:

§45-7-3.1

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from

any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

§45-7-3.2

The provisions of 45CSR§7-3.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.

§45-7-3.7

No person shall cause, suffer, allow, or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device.

§45-7-4.1

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of 45CSR7A.

§45-7-5.1

No person shall cause, suffer, allow, or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

§45-7-5.2

The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

**[45CSR13, R13-1477 (Condition B.2.)]**

## **5.2. Monitoring Requirements**

5.2.1. Tests that are required by the Director to determine compliance with the emission limitations set forth in Condition 5.1.2 of this permit shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at the maximum permitted operating conditions unless otherwise specified by the Director.

a. Tests to determine compliance with PM emission limits shall be conducted in accordance with 45CSR7A. **[45CSR13, R13-1477 (Condition B.5.)]**

- 5.2.2. With regard to any testing required by the Director, the permittee shall submit to the Director of Air Quality a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.

**[45CSR13, R13-1477 (Condition B.6)]**

**5.3. Testing Requirements**

N/A

**5.4. Recordkeeping Requirements**

- 5.4.1. A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.

**[45CSR§30-5.1.c.]**

- 5.4.2. For the purposes of determining compliance with maximum throughput limits set forth in Condition 5.1.3, the applicant shall maintain monthly records of the throughputs of the specified materials and the hours of operation of the bulldozing operations. For the purposes of determining compliance with the water truck requirement in Condition 5.1.4, the applicant shall maintain a certified daily and monthly record of water truck usage. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or his/her duly authorized representative upon request.

**[45CSR13, R13-1477, (Condition B.7.)]**

**5.5. Reporting Requirements**

N/A

**5.6. Compliance Plan**

N/A

## **6.0 Source-Specific Requirements [Crusher CRU-03 and Conveyor C-11]**

### **6.1 Limitations and Standards**

- 6.1.1. Emission Units CRU-03 and C-11 shall not discharge into the atmosphere gases which exhibit 20 percent opacity or greater.  
[40 C.F.R. § 60.252(c)]

### **6.2. Monitoring Requirements**

- 6.2.1. Emission Units CRU-03 and C-11 shall be observed visually at least each calendar month during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 C.F.R. 60 Appendix A, Method 22. If visible emissions are observed during these monthly observations, or at any other time, that appear to exceed the allowable visible emission requirement in Condition 6.1.1, visible emissions evaluations in accordance with 40 C.F.R. Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one month from the time of the observation. A visible emissions evaluations in accordance with 40 C.F.R. Appendix A, Method 9 shall not be required under Condition 6.2.1 if the visible emissions condition is corrected in a timely manner; the emission unit CRU-03 is operating at normal operation conditions; and, the cause and corrective measures taken are recorded.  
[45CSR§30-5.1c; 40 C.F.R. § 60.254]

### **6.3. Testing Requirements**

- 6.3.1. In conducting the performance tests required in 40 C.F.R. § 60.8, the owner or operator shall use as a reference methods and procedures the test methods in Appendix A of 40 C.F.R. 60, or other methods and procedures as specified in 40 C.F.R. § 60.8, except as provided in 40 C.F.R. § 60.8(b).  
[40 C.F.R. § 60.254]

### **6.4. Recordkeeping Requirements**

- 6.4.1. The Permittee shall retain records of all required monitoring data and support information.  
[45CSR§30-5.1c.]

### **6.5. Reporting Requirements**

N/A

### **6.6. Compliance Plan**

N/A

## **APPENDIX A**

### Harrison Power Station NO<sub>x</sub> Budget Permit Application



**Harrison Power Station**

Plant Name (from Step 1)

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**(b) Monitoring Requirements**

- (1) The owners and operators and to the extent applicable the NO<sub>x</sub> authorized account representative of each NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit at the source shall comply with the monitoring requirements of sections 70 through 76 of 45CSR1 or 45CSR26, and/or subpart H of 40 CFR part 97 as applicable.
- (2) The emissions measurements recorded and reported in accordance with sections 70 through 76 of 45CSR1 or 45CSR26 and/or subpart H of 40 CFR part 97 shall be used to determine compliance by the unit with the NO Budget emissions limitation under paragraph (c).

**(c) Nitrogen Oxides Requirements**

- (1) The owners and operators of each NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit at the source shall hold NO<sub>x</sub> allowances available for compliance deductions under subsections 45CSR1 54.1 54.2 54.5 or 54.6 45CSR26-54.1 54.2 54.5 or 54.6 and/or § 97.54(a) (b) (e) or (f) as applicable as of the NO<sub>x</sub> allowance transfer deadline in the compliance account and the source overdraft account in an amount not less than the total NO<sub>x</sub> emissions for the ozone season from the unit, as determined in accordance with sections 70 through 76 of 45CSR1 or 45CSR26 and/or subpart H of 40 CFR part 97 as applicable plus any amount necessary to account for actual heat input under subsection 42.5 of 45CSR1 or 45CSR26 and/or § 97.42(e) for the ozone season period or to account for excess emissions for a prior ozone season under subsection 54.4 of 45CSR1 or 45CSR26 and/or § 97.54(d) or to account for withdrawal from the NO Budget Trading Program or a change in regulatory status of a NO Budget option unit under sections 86 or 87 of 45CSR1 and/or § 97.96 or § 97.87 as applicable.
- (2) Each ton of nitrogen oxides emitted in excess of the NO<sub>x</sub> Budget emissions limitation shall constitute a separate violation of 45CSR1 or 45CSR26 §§22.5.1 et seq., and/or 40 CFR part 97 and the Clean Air Act.
- (3) A NO<sub>x</sub> Budget unit shall be subject to the requirements under paragraph (c)(1) starting on the later of May 31, 2004 for NO Budget units under 45CSR1 45CSR26 and/or 40 CFR part 97 or the date on which the unit commences operation.
- (4) NO<sub>x</sub> allowances shall be held in, deducted from, or transferred among NO<sub>x</sub> Allowance Tracking System accounts in accordance with sections 40 through 43 50 through 57 60 through 62 and 70 through 76 of 45CSR1 or 45CSR26 sections 80 through 86 of 45CSR1 and/or subparts E F G and I of 40 CFR part 97 as applicable.
- (5) A NO<sub>x</sub> allowance shall not be deducted in order to comply with the requirements under paragraph (c)(1) for an ozone season in a year prior to the year for which the NO allowance was allocated.
- (6) A NO<sub>x</sub> allowance allocated by the Director or EPA Administrator under the NO<sub>x</sub> Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO<sub>x</sub> Budget Trading Program. No provision of the NO<sub>x</sub> Budget Trading Program the NO Budget permit application the NO<sub>x</sub> Budget permit or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26 and/or § 97.4(b) or § 97.5 as applicable and no provision of law shall be construed to limit the authority of the Division of Environmental Protection of the United States to terminate or limit such authorization.
- (7) A NO<sub>x</sub> allowance allocated by the Director or EPA Administrator under the NO<sub>x</sub> Budget Trading Program does not constitute a property right.
- (8) Upon recordation by the EPA Administrator every allocation transfer or deduction of a NO<sub>x</sub> allowance to or from a NO<sub>x</sub> Budget unit's compliance account or the overdraft account of the source where the unit is located is incorporated automatically in any NO Budget permit or the NO<sub>x</sub> Budget unit.

**(d) Excess Emissions Requirements**

- (1) The owners and operators of a NO<sub>x</sub> Budget unit that has excess emissions in any ozone season shall:
- (i) Surrender the NO<sub>x</sub> allowances required for deduction under subdivision 54.4.a of 45CSR1 or 45CSR26 and/or § 97.54(d)(1) as applicable and
  - (ii) Pay any fine penalty or assessment or comply with any other remedy imposed under subdivision 54.4.c of 45CSR1 or 45CSR26 and/or § 97.54(d)(3).

**(e) Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the NO Budget source and each NO<sub>x</sub> Budget unit at the source shall keep on file 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 prior to the end of 5 years in writing by the Director or the EPA Administrator:
- (i) The account certificate of representation under 45CSR1 13 or 45CSR26-13 and/or § 97.13 as applicable for the NO<sub>x</sub> authorized account representative for the source and each NO<sub>x</sub> Budget unit at the source and all documents that certify the unit's compliance in the account 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 account certificate of representation under 45CSR1 13 or 45CSR26-13 and/or § 97.13 (as applicable) changing the NO<sub>x</sub> authorized account representative.
  - (ii) All emissions monitoring information in accordance with sections 70 through 76 of 45CSR1 or 45CSR26 and/or subpart H of 40 CFR part 97 (as applicable) provided that to the extent that sections 70 through 76 of 45CSR1 or 45CSR26 and/or subpart H of 40 CFR part 97 (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 NO<sub>x</sub> Budget Trading Program.
  - (iv) Copies of all documents used to complete a NO Budget permit application and any other submitted under the NO<sub>x</sub> Budget Trading Program or to demonstrate compliance with the requirements of the NO<sub>x</sub> Budget Trading Program.
- (2) The NO<sub>x</sub> authorized account representative of a NO Budget source and each NO<sub>x</sub> Budget unit at the source shall submit the reports and compliance certifications required under the NO<sub>x</sub> Budget Trading Program including those under sections 40 and 70 through 76 of 45CSR1 or 45CSR26 sections 80 through 86 of 45CSR1 and/or subparts D H or I of 40 CFR part 97 as applicable.

<b>Harrison Power Station</b>
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NO<sub>x</sub> Budget Permit Application  
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**(f) Liability**

(1) Any person who knowingly violates any requirement or prohibition of the NO<sub>x</sub> Budget Trading Program or NO<sub>x</sub> Budget permit or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26 and/or § 97.4(b) or § 97.5 shall be subject to enforcement pursuant to W. Va. Code §§22-5-1 et seq. or the Clean Air Act.

(2) Any person who knowingly makes a false material statement in any record, submission or report under the NO<sub>x</sub> Budget Trading Program shall be subject to criminal enforcement pursuant to §§22-5-1 et seq. or the Clean Air Act.

(3) No permit revisions shall exceed any variation of the requirements of the NO<sub>x</sub> Budget Trading Program that occurs prior to the date that the revision takes effect.

(4) Each NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit shall meet the requirements of the NO<sub>x</sub> Budget Trading Program.

(5) Any provision of the NO<sub>x</sub> Budget Trading Program that applies to a NO<sub>x</sub> Budget source or the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget source shall also apply to the owners and operators of such source and of the NO<sub>x</sub> Budget units at the source.

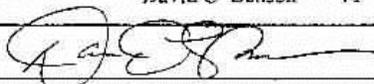
(6) Any provision of the NO<sub>x</sub> Budget Trading Program that applies to a NO<sub>x</sub> Budget unit or the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under sections 70 through 76 of 45CSR1 or 45CSR26 and/or subpart H of 40 CFR part 97, as applicable, the owners and operators and the NO<sub>x</sub> authorized account representative of one NO<sub>x</sub> Budget unit shall not be liable for any violation by any other NO<sub>x</sub> Budget unit or which they are not owners or operators or the NO<sub>x</sub> authorized account representative and that is located at a source of which they are not owners or operators or the NO<sub>x</sub> authorized account representative.

**(g) Effect on Other Authorities**

No provision of the NO<sub>x</sub> Budget Trading Program or NO<sub>x</sub> Budget permit application, a NO<sub>x</sub> Budget permit or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26 and/or § 97.4(b) or § 97.5, shall be construed as exempting or excluding the owners and operators and to the extent applicable, the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget source or NO<sub>x</sub> Budget unit from compliance with any other provision of the applicable approved State Implementation Plan, a federally enforceable permit or the Clean Air Act.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the NO<sub>x</sub> Budget sources or NO<sub>x</sub> Budget 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 or 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.

David C Benson    VP Production & Sales	
Name	
Signature	
Date	2-7-02

## **APPENDIX B**

### **HARRISON POWER STATION REVISION 2**

#### **Monitoring and Recordkeeping Plan 45 CSR 2 and 45 CSR 10 Utility Boilers**

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**Monitoring and Recordkeeping Plan**  
**45 CSR 2 and 45 CSR 10**  
**Utility Boilers**

**Facility Information:**

Facility Name	Harrison Power Station
Facility Address	Harrison Power Station State Route 20 (P O Box 600) Haywood, WV 26366
Facility Contact	Ronald Windon Regional Director, Harrison / Rivesville Telephone (304) 584-2233 FAX # (304) 584-2265
Environmental Manager	Jeannine Hammer Monroeville Energy Center Telephone (412) 858 - 1668

**Facility Description** (Plant ID # 3300015)

Harrison Power Station is a coal-fired electric generating facility with three main combustion units (Units 1, 2 & 3) with in-service dates of 1972, 1973, and 1974 respectively, discharging through three scrubbed stacks (1, 2, and 3) within a single stack shell. The plant was retrofitted with a flue-gas desulfurization system on all three units in 1995. The scrubbed stacks have a height of approximately 1,000', each with an outlet diameter of approximately 26'. Each combustion unit is also equipped with an electrostatic precipitator (EPS) with 99.5% removal efficiency. The plant still has two original unscrubbed stacks, each with a height of 1,000' and an outlet diameter of 35' that were retained for use as bypass stacks in the event of an emergency. There are two hyperbolic cooling towers that service the three units. Harrison Power Station has two auxiliary boilers (1A and 1B) that discharge to a separate (auxiliary) stack. Each unit has a design heat input greater than 10mmBtu/hr making them subject to 45CSR 2 and 45 CSR 10.

**I. 45 CSR 2 Monitoring Plan**

In accordance with § 8.2A of 45 CSR 2, the following proposed plan is for monitoring compliance with opacity limits found in § 3 of that rule.

**A. Scrubbed Stacks 1, 2 and 3 ; Original Unscrubbed Stacks 1 and 2**

**1. Applicable Standards:**

- a.) Visible Emission Limit 10% opacity based on a six-minute block average 45 CSR 2, §3.1
- b.) Weight Emission Limit 316.25 lbs/hour per stack, calculated per 45 CSR 2, §4.1 a

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**2. Monitoring Methods**

- a Per 45 CFR Part 75 (Acid Rain), the scrubbed stacks are exempt from the COMS requirement. Parametric monitoring will be the primary method for monitoring opacity at Harrison Power Station. Other monitoring methods will be used in the absence of parametric monitoring data or as credible evidence used in conjunction with the parametric monitoring data.
- b Section 45 CSR 2A§6.3.a.1 requires that the monitoring plan include provisions to take Method 9 readings for compliance determination at a minimum of once per month per stack when the source has operated at normal conditions for at least twenty-four hours. The three units at Harrison are scrubbed and exhaust to three stacks within a single liner, creating a combined plume. Consequently a Method 9 reading to determine compliance for any single stack cannot be obtained. An exemption from the requirement to monitor opacity using Method 9 has been requested (see cover letter dated 09/25/2002) based on the inability to obtain accurate Method 9 readings for a single stack. As an alternate means of complying with 45CSR 2, Harrison Power Station is requesting approval to monitor daily compliance with the weight emissions standard via parametric monitoring as described in this plan (Section I A.2).

Section 45 CSR 2A§6.3.A.8.a requires Method 9 readings for parametric excursions exceeding one hour. An exemption from this requirement has also been requested (see cover letter dated 09/25/2002) because Harrison Power Station is not collecting hourly data as part of its parametric monitoring plan. Parametric monitoring at Harrison Power Station will consist of daily data collection and calculations for the various parameters included in this plan, with follow-up Method 9 readings as described in the response plan (see Section h).

- c Harrison Power Station will use the guidance and methodology provided by WV DAQ to calculate the Allowable Particulate Emission Rate (lb/hr), the Potential Particulate Emission Rate (lb/hr), the Calculated Particulate Emission Rate (lb/hr), the Required Control Efficiency (%) and the actual Precipitator Efficiency (%) for the three electrostatic precipitators (ESPs) on a daily basis. These calculations may be based on, but are not limited to, the following data for each of the three precipitators:

**45 CSR 2A §6.3.a.2 Monitored Input Parameters**

- Coal Heating Value (Btu/lb)
- Coal – Ash (%)
- Ash LOI (%)
- Flyash (Tons)
- Bottom Ash (Tons)
- CEMS Heat Input (mmBtu/hr)
- ESP Power (W)
- 1A Secondary Gas Out Temp Avg (°F)
- 1B Secondary Gas Out Temp Avg (°F)
- A Side O<sub>2</sub> Avg (%)
- B Side O<sub>2</sub> Avg (%)
- Ambient Temperature (°F)

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**45 CSR 2A §6.3.a.2 Constant Input Parameters**

Coal F-Factor (wscf/mmBtu) = 10,680  
Total DHI @ 100% Load (mmBtu/hr) = 6325

The value for Total Design Heat Input was obtained from the Foster Wheeler Vol 1 Summary Performance Sheet @ 100% load

**45 CSR 2A §6.3.a.2 Calculated Parameters**

The following calculations use the Monitored and Constant parameters listed previously

“Alternate” Coal Feedrate (lb/hr)  
“Alternate” Air Flowrate (wscf/min)  
Temperature Correction Factor  
Excess Air Correction Factor  
“Corrected” Air Flowrate (ACFM)  
Corona Power Density (W / 1000 ACFM)  
Allowable Particulate Emission Rate (lb/hr)  
Potential Particulate Emission Rate (lb/hr)  
Calculated Particulate Emission Rate (lb/hr)  
Required Precipitator Efficiency (%)  
Calculated Precipitator Efficiency (%)

**d. 45 CSR 2A §6.3.a.3 Monitoring Method and Frequency**

**Monitoring Method**

The parameters listed in the previous sections will be used to calculate a Precipitator Efficiency (%) and a Particulate Emission Rate (lbs/hr) on a daily basis. These calculated values will be compared to the calculated Required Control Efficiency (%) and Allowable Particulate Emission Rate (lb/hr) respectively. In addition the input parameters will be checked monthly/daily to determine if they fall within the nominal ranges specified in section 1 e of the monitoring plan.

**Frequency**

Input parameters will be obtained either as daily readings or as monthly averages. All calculated parameters will be updated daily to reflect the new values.

The following data will be collected as monthly averages from the most recently completed monthly Performance Report for the station:

Coal – Heating Value (Btu/lb)  
Coal – Ash %  
Ash – LOI %  
Flyash (Tons)  
Bottom Ash (Tons)

A reading will be collected once per day from the Digital Control System (DCS), the Precipitator Control System, or the CEM system for each of the following input parameters:

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- CEMS Heat Input (mmBtu/hr)
- ESP Power (W)
- 1A Secondary Gas Out Temp Avg (°F)
- 1B Secondary Gas Out Temp Avg (°F)
- A side O2 Avg (%)
- B side O2 Avg (%)
- Ambient Temperature (°F)

The remaining parameters are calculated as detailed in Appendix A

**e. 45 CSR 2A §6.3.a.4 Nominal Range of Input Parameters**

The potential emissions and monitoring parameter calculations in the equations specified by WVDAQ's guidance will vary with fluctuations in the input parameters. The following nominal ranges are representative of the input parameters, on a per unit basis

PARAMETER	UNIT 1	UNIT 2	UNIT 3
<u>Monthly</u>			
Coal-Heating Value, Btu/lb	12,150 - 12,600	12,150 - 12,600	12,150 - 12,600
Coal - Ash %	11.4 - 13.1	11.4 - 13.1	11.4 - 13.1
Ash LOI %	3.0 - 8.0	3.0 - 8.0	3.0 - 8.0
Flyash, Tons/month	-----Total Station 30,000 - 52,000-----		
Bottom Ash, Tons/month	-----Total Station 7,000 - 16,000-----		
<u>Daily</u>			
CEMS Heat Input (mmBtu/hr)	0 - 8200	0 - 8200	0 - 8200
ESP Power (kW)	300 - 1200	300 - 1200	300 - 1200
A Side Gas Out Temp Avg (°F)	150-400	150-400	150 - 400
B Side Gas Out Temp Avg (°F)	150-400	150-400	150 - 400
Ambient Temperature (°F)	-10-100	-10-100	-10 - 100
A Side O2 Avg (%)	0 - 10	0 - 10	0 - 10
B Side O2 Avg (%)	0 - 10	0 - 10	0 - 10

**f. 45 CSR 2A §6.3.a.5 Explanation of Chosen Input Parameters and How They Are Indicative of Compliance**

Appendix A illustrates how the chosen input parameters are used to indicate compliance. The input parameters are used to calculate a precipitator efficiency (%) and particulate emission rate (lb/hr) on a daily basis. An input parameter excursion alone will not be considered as evidence of compliance or non-compliance (45 CSR 2.8.2 a.3) [Note: Subsequent excursions of the same input parameter may warrant a revision to the nominal range.]

**g. 45 CSR 2A §6.3.a.6 Explanation of how Nominal Ranges were Chosen**

The nominal ranges listed above were based on historical data from 1999 through 2001 for all parameters except CEMS Heat Input and ESP Power. Ranges for CEMS Heat Input were obtained from a review of historical data from January 2001 to the present,

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and ESP Power ranges were obtained from a review of the most recent few months' data as of June 2002. All ranges are representative of actual data during typical ~ operating loads. These values may be updated in the future as operating conditions dictate.

**h. 45 CSR 2A §6.3.a.8 Response Plan to be Implemented During Opacity Excursions**

If an input parameter exceeds the nominal range or the calculated precipitator efficiency or calculated particulate emission rate exceed the required values, station personnel will take action as soon as possible to correct the problem. A second parametric data computation or a Method 9 reading will be taken after any equipment checks or actions have been taken to correct the excursion. This computation or Method 9 reading should occur no later than 24 hours from the first computation. This sequence of actions should continue until 1) the parameter falls back into range and/or the parametric computation yields results within the standard, or 2) a Method 9 reading shows compliance with the opacity standard. If the total percentage of time for this parametric excursion in combination with all other excursions in the reporting period (calendar quarter) exceeds 10% of the total operating time in the reporting period, a stack test will be scheduled for that unit. Data obtained from the stack test will then be compared to the parametric monitoring data and documented to show the relationship between measured particulate emission rate values and the parametric monitoring values taken during the test. If the stack test shows compliance with the particulate standard, then the nominal input parameter ranges can be adjusted accordingly.

**B. Auxiliary Stack**

1. Applicable Standard: 10% opacity based on a six-minute block average 45 CSR 2, § 3.1
2. Monitoring Method(s)

Harrison Power Station is petitioning the Office of Air Quality (OAQ) Chief for alternative monitoring requirements and exemption from testing for the auxiliary boilers and the associated stack, pursuant to 45 CSR2 Section 8.4.a and 8.4.a.1 (Infrequent Use exception). Based on an average heat content of 139,000 mmBtu/gallon and a design heat input of 202.2 mmBtu/hour, auxiliary boilers 1A and 1B each averaged 0.8 hours of oil-fired operation over the 1998-1999 two year time period. Similarly, each boiler averaged 7 hours of natural gas firing (approximate heat value 1,000 Btu/scf) over the two year period. Thus, the average total hours of operation for auxiliary boilers is approximately 8 hours per boiler per year, or less than 0.1% of the available hours for each boiler. Based on these limited operating hours, we believe that the requirement for COMS installation per 45 CSR2A Section 6.2.a is overly burdensome and sufficient reason for the granting of alternative monitoring methods. Harrison Power Station is proposing, as an alternative to COMS monitoring, that Method 9 (visible emission) readings, with a minimum duration of 30 minutes, be conducted once a 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.

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## II. 45 CSR 10 Monitoring Plan:

In accordance with § 8 2c of 45 CSR 10, following is the proposed plan for monitoring compliance with the sulfur dioxide weight emission standards expressed in § 3 of that of that rule

### A. Scrubbed Stacks 1, 2 and 3 ; Original Unscrubbed Stacks 1 and 2

- 1 Applicable Standard The product of 5 12 and the total actual heat inputs for all units discharging through the stacks in million BTU's per hour Compliance with the SO<sub>2</sub> limit is based on a continuous 24-hour averaging time, 45 CSR 10, § 3 3a
- 2 Primary Monitoring Method The primary method of monitoring SO<sub>2</sub> mass emissions from Stacks 1, 2 and 3 (and Original Unscrubbed Stacks 1 and 2, if used) will be Continuous Emission Monitors (CEMS) The CEMS are installed, maintained and operated in compliance with 40 CFR Part 75 As specified in 45 CSR 10, § 8 2 c.1, measurement with a certified CEMS shall satisfy the monitoring plan requirements
- 3 Other Credible Monitoring Methods While CEMS is the primary monitoring method, in the absence of CEMS, we reserve the right to use ASTM compliant fuel sampling and analysis or any other appropriate method that would produce credible data

### B. Auxiliary Stack

- 1 Applicable Standard The product of 3 2 and the total design heat inputs for Type "b" fuel burning units, discharging through the stacks in million BTU's per hour Compliance with the SO<sub>2</sub> limit is based on a continuous 24-hour averaging time Ref 45 CSR 10, § 3 3 f and 3 8
- 2 Monitoring, Recordkeeping, and Exception Reporting Requirements The Harrison Power Station auxiliary boilers (and stack) are exempt from the Testing, Monitoring, Recordkeeping, and Reporting requirements found under 45 CSR 10, § 8 in accordance with 45 CSR 10 § 10 3 because the fuel burning sources combust a combination of distillate oil and natural gas 45 CSR 10, § 3 8 also contains the requirement for the development of a monitoring plan Because the burning of distillate oil results in an SO<sub>2</sub> emission rate well below the standard, fuel sampling and analysis may continue to be performed at this facility, but will be done so at the discretion of the owner/operator Because the burning of natural gas results in negligible SO<sub>2</sub> emission rates, fuel sampling and analysis of natural gas will not be performed It is not required by this monitoring plan for the purposes of indicating compliance of the auxiliary boilers with SO<sub>2</sub> standards

## III. 45 CSR 2 Recordkeeping and Reporting Plan

### A. Operating Schedule and Quality/Quantity of Fuel Burned

- 1 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 determined in 45 CSR 2A, § 7 1 a

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- 2 Pipeline quality natural gas only, If used such record shall include, but not limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis as determined in 45 CSR 2A, § 7 1 a 1
- 3 Distillate oil only 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 as determined in 45 CSR 2A, § 7 1 a 2
- 4 Coal only 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, BTU and sulfur content analysis for each shipment as determined in 45 CSR 2A, § 7 1 a 4
- 5 Alternative, and/or opportunity fuel(s) such records shall include, but not be limited to, the date and time of start-up and shutdown, and fuel quality analysis as approved by the director as determined by 45 CSR 2A, § 7 1 a 5
- 6 Combination of fuels the owner or operator shall comply with the applicable recordkeeping requirements of §§ 7 1 a 1 through 7.1 a 5 for each fuel burned as determined in 45 CSR 2A, § 7 1 a 6

**B Record Maintenance**

- 1 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, testing, measurement and reporting Support information includes all calibration and maintenance records, strip charts, and copies of all required reports In the case of auxiliary boilers, strip chart recordings, etc, are generally not available

**C. Exception Reporting**

- 1 Compliance with the reporting and testing requirements under the Appendix to 45 CSR 2 shall fulfill the requirement for a periodic exception report under subdivision 8 3 b or 45 CSR 2 – 45 CSR 2A, § 7 2 a
- 2 Non-COMS Based Monitoring, Summary Report and Excursion Report Each owner or operator employing non-COMS based monitoring shall submit a monitoring summary report and/or an excursion report to the Director on a quarterly basis (within 30 days of the end of the quarter) The Director may request more frequent reporting if deemed necessary to accurately assess the compliance of the units The report shall be in a format approved by the Director Ref 45 CSR 2A, § 7 2 c
  - a If the total number of excursions for the reporting period is less than one percent (1%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan, the monitoring summary report shall be submitted to the Director, and the excursion report shall be maintained on-site and shall be submitted to the Director upon request Ref 45 CSR 2A, § 7 2 c 1

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- b If the number of excursions for the reporting period is one percent (1%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater, the monitoring plan summary report and the excursion report shall both be submitted to the Director Ref 45 CSR 2A, § 7 2 c 2
  - c The excursion and non-COMS monitoring plan report shall be in a format approved by the Director and shall include, but not be limited to, the following Ref 45 CSR 2A, § 7 2 c 3, 7 2 c 3 A, B, C, D, and E
  - d The magnitude of each excursion, including the date and time, and the starting and ending times of each excursion
  - e Specific identification of each excursion that occurs during startups, shutdowns and malfunctions
  - f The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any)
  - g The date and time identifying each period during when data is unavailable, and the reason for data unavailability and the corrective action taken
  - h When no excursions have occurred or there were no periods of data unavailability, such information shall be stated in the report
  - i To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45 CSR 2 shall be followed Ref 45 CSR 2A, § 7 2 d
- 3 Pursuant to 45 CSR 2, Section 8 4 a and 8 4 a 1, Harrison Power Station is petitioning the Office of Air Quality (OAQ) Chief for alternative testing, monitoring, and reporting requirements for the auxiliary boilers and associated stack The basis for the "infrequent operation" petition is found in the quantity of fuel used during the last few years as detailed earlier in this plan
- a As an alternative to the testing and exception reporting requirements for particulate mass emissions from the auxiliary boilers, we propose that 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 Based on an average heat content (distillate oil) of approximately 139,000 Btu/gallon and an AP-42 based particulate mass emissions emission factor of 2 lbs/thousand gallons, the calculated particulate mass emissions of the auxiliary boilers are 0 01 lb/mmBtu for each boiler when firing distillate oil Based on an average heat content (natural gas) of approximately 1,000 Btu/scf and an AP-42 based filterable PM emission factor of 1 9 lb/Mcf, the calculated particulate mass emissions of the auxiliary boilers are 0 0019 lb/mmBtu for each boiler. Hence, it is estimated that each boiler has a calculated particulate mass emissions rate of approximately 0 0019 lb/mmBtu when firing natural gas For the purpose of meeting exception reporting requirements for fuel oil, any fuel oil analysis indicating a heat content of less than

*REVISION 2*

25,000 Btu/gallon will be reported to the OAQ to fulfill the requirement for a periodic exception report under 45 CSR 2 Section 8 3 b and 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 weight emission standard Ref 45 CSR 2, § 4 1 b

- b As an alternative to the exception reporting requirements for opacity emissions from the auxiliary boilers, we are proposing to maintain a copy of each properly conducted (appropriate weather and lighting conditions, etc ) Method 9 evaluation on-site Any properly conducted Method 9 test that 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 of 45 CSR 2 Section 9 shall be followed. Ref 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 include periods in which no Method 9 tests were conducted (e g unit out of service) or when no fuel oil was received

**IV. 45 CSR 10 Recordkeeping and Reporting Plan**

**A. Operating Schedule and Quality/Quantity of Fuel Burned**

- 1 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 unit 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 a periodic fuel quality analysis as set forth below Ref 45 CSR 10 A, § 7 1 a

- a  $\geq 90\%$  of Factor      daily
- b  $< 90\%$  of Factor      per shipment

The owner or operator shall provide in the monitoring plan a quality control and quality assurance program for the fuel analysis If a certified independent laboratory is used to provide the fuel analysis, the quality control and assurance program is deemed to be satisfactory Ref 45 CSR 10A, § 7 1 a 1

- c The owner/operator of fuel burning units utilizing CEMS shall be exempt from the provisions of 7 1 a and 7 1 b Ref 45 CSR 10A, § 7 1 c

*REVISION 2*

**B. Record Maintenance**

- 1 For fuel burning units, and combustion sources, 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, and copies of all reports. Ref 45 CSR 10A, § 7 1 d

**C. Exception Reporting**

- 1 CEMS – each owner or operator employing CEMS for an approved monitoring plan shall submit a CEMS summary report and/or an excursion report quarterly (within 30 days of end of quarter) to the Director. The Director may request more frequent reports if deemed necessary to assess compliance of the units. The CEMS report shall be submitted in a format approved by the Director, or as specified by the Director. Ref 45 CSR 10A, § 7 2 a
  - a Submittal of 40 CFR Part 75 data in electronic data reporting (EDR) format to the Director shall be deemed to satisfy the requirements of Section 7.2 a. Ref 45 CSR 10A, § 7 2 a 1
- 2 If the total duration of excursions for the reporting period is less than four percent (4%) of the total source operating time for the reporting period and the total monitoring method downtime for the reporting period is less than five percent (5%) of the total source operating time for the reporting period, only the CEMS summary shall be submitted. The excursion summary shall be maintained on-site and shall be submitted to the Director upon request. Ref 45 CSR 10A, § 7 2 a 2
- 3 If the total duration of excursions for the reporting period is four percent or greater of the total operating time for the reporting period or the total monitoring method downtime for the reporting period is five percent (5%) or greater of the total operating time for the reporting period, the CEMS summary report and the excursion report shall both be submitted to the Director. Ref 45 CSR 10A, § 7 2 a 3
- 4 The CEMS excursion and monitoring report shall be in format approved by the Director and shall include the following information. Ref 45 CSR 10 A, § 7 2 a 4
  - a The magnitude of each excursion, and the date and time, including starting and ending times of each excursion. Ref 45 CSR 10A, § 7 2 a 4 A
  - b Specific identification of each excursion that occurs during startups, shutdowns, and malfunctions of the facility. Ref 45 CSR10A, § 7.2 a 4 B
  - c The nature and cause of any malfunction (if known), and the corrective action taken and preventive measures adopted. Ref 45 CSR 10A, § 7 2 a 4 C
  - d The date and time identifying each period during which quality assured 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. Ref 45 CSR 10A, § 7 2 a 4 D

*REVISION 2*

- e When no excursions have occurred or there were no periods of quality assured unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report Ref 45 CSR 10A, § 7 2 a 4 E
- 5 Non-COMS based monitoring – each owner or operator employing non COMS based monitoring shall submit a monitoring summary report and an excursion report to the Director on a quarterly basis (within 30 days of the end of the quarter) The Director may require more frequent reporting if deemed necessary to assess the compliance of the fuel burning units The monitoring summary report shall contain the information and be in a format approved by the Director Ref 45 CSR 10A, § 7 2 b
- a If the total number of excursions for the reporting period is less than four percent (4%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan, the monitoring summary report shall be submitted to the Director, and the excursion report shall be maintained on-site and shall be submitted to the Director upon request Ref 45 CSR 10A, § 7 2 b 1
  - b If the number of excursions for the reporting period is four percent (4%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater, the monitoring plan summary report and the excursion report shall both be submitted to the Director Ref 45 CSR 10A, § 7 2 b 2
- 6 The CEMS excursion and monitoring report shall be in format approved by the Director and shall include the following information Ref 45 CSR 10 A, § 7 2 b 3
- a The magnitude of each excursion, and the date and time, including starting and ending times of each excursion Ref 45 CSR 10A, § 7 2 b 3 A
  - b Specific identification of each excursion that occurs during startups, shutdowns, and malfunctions of the facility Ref 45 CSR10A, § 7 2 b 3 B
  - c The nature and cause of any malfunction (if known), and the corrective action taken and preventive measures adopted Ref 45 CSR 10A, § 7 2 b 3 C
  - d The date and time identifying each period during which quality assured 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 Ref 45 CSR 10A, § 7 2 b 3 D
  - e When no excursions have occurred or there were no periods of quality assured unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report Ref 45 CSR 10A, § 7 2 b 3 E

*REVISION 2*

**D. Auxiliary Stack (1A) Recordkeeping and Reporting**

- 1 Recordkeeping, and Exception Reporting Requirements The Harrison Power Station auxiliary boilers (and stack) are exempt from the Testing, Monitoring, Recordkeeping, and Reporting requirements found under 45 CSR 10, § 8 because the fuel burning unit(s) combust natural gas and/or distillate oil Ref 45 CSR 10, §10

REVISION 2  
APPENDIX A

**Coal Feedrate** *Alternate* (lb/hr)

$$= \frac{\text{Heat Input}_{CEMS} \text{ (mmBtu/hr)} * 1000000 \text{ (Btu/mmBtu)}}{\text{Coal Heating Value (Btu/lb)}}$$

Variables required for this calculation are as follows

Heat Input <i>CEMS</i> (mmBtu/hr)	Source of this value is the CEM System
Coal Heating Value (Btu/lb)	Source of this value is the Performance Report Fuel Data

-----  
**Air Flowrate** *Alternate* (wscf/hr)

$$= \text{Coal Feedrate}_{Alternate} \text{ (lb/hr)} * F \text{ Factor (wscf/mmBtu)} * \frac{1}{10^6} \text{ (mmBtu/Btu)} * \text{Coal Heating Value (Btu/lb)}$$

Variables required for this calculation are as follows

Coal Feedrate <i>Alternate</i> (lb/hr)	Source of this value is a previous calculation
F- Factor (wscf/mmBtu)	This value is a constant equal to 10,680 for coal
Coal Heating Value (Btu/lb)	Source of this value is the Performance Report Fuel Data

**Note: The following equation yields the same result after substitution of the calculation expression for Coal Feedrate *Alternate* and the cancellation of terms.**

**Air Flowrate** *Alternate* (wscf/hr)

$$= \text{Heat Input}_{CEMS} \text{ (mmBtu/hr)} * F \text{ Factor (wscf/mmBtu)}$$

-----

REVISION 2

**Air Flowrate** *Corrected* (ACFM)

$$= \text{Air Flowrate}_{Alternate} (\text{wscf} / \text{hr}) * \frac{1}{60} (\text{hr} / \text{min}) * \left( \frac{460 + \text{ESP Temp}}{460 + \text{Ambient}} \right) * (1 + \text{Excess Air})$$

Variables required for this calculation are as follows

Air Flowrate <i>Alternate</i> (wscf/hr)	Source of this value is a previous calculation
ESP Temp	Source of this value is the DCS
Ambient Temp	Source of this value is the DCS
Excess Air	Source of this value is a calculation based on O2 readings from the DCS

**Excess Air** (%)

$$= \frac{1}{2} * \left[ \left( \frac{A \text{ side } O_2 \text{ Avg}}{20.9 - A \text{ side } O_2 \text{ Avg}} \right) + \left( \frac{B \text{ side } O_2 \text{ Avg}}{20.9 - B \text{ side } O_2 \text{ Avg}} \right) \right]$$

Variables required for this calculation are as follows

A side O2 Avg	Source of this value is the DCS
B side O2 Avg	Source of this value is the DCS

**Corona Power Density** (W/1000 ACFM)

$$= \frac{\text{ESP}_{power} (W)}{\frac{\text{Air Flowrate}_{Corrected} (ACFM)}{1000}}$$

Variables required for this calculation are as follows

ESP <i>power</i> (W)	Source of value is the Precipitator Control System
Air Flowrate <i>Corrected</i> (ACFM)	Source of this value is a previous calculation

REVISION 2

**Allowable Particulate Emission Rate** (lb/hr)

$$\begin{aligned} &= 0.05 * \text{Total Design Heat Input (mmBtu/hr)} \\ &= 0.05 * 6325 \text{ (mmBtu/hr)} = 316.3 \text{ (mmBtu/hr)} \end{aligned}$$

Variables required for this calculation are as follows

Total Design Heat Input (mmBtu/hr)

Source of this value is Foster Wheeler Vol 1 Summary Performance Sheet @ 100 % Load

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**Potential Particulate Emission Rate** (lb/hr)

$$= \frac{\text{Coal Feedrate}_{Alternate} \text{ (lb/hr)} * \frac{\text{ash (lb)}}{\text{fuel (lb)}} * \frac{\text{flyash (lb)}}{\text{ash (lb)}}}{1 - \left( \frac{\text{unburned carbon (lb)}}{\text{flyash (lb)}} \right)}$$

Variables required for this calculation are as follows

Coal Feedrate <sub>Alternate</sub> (lb/hr)	Source of this value is a previous calculation
ash (lb) / fuel (lb)	Source of this value is the Performance Report Fuel Data
flyash (lb) / ash (lb)	Source of these values is the Performance Report Fuel Data
unburned carbon (lb) / flyash (lb) ( LOI )	Source of this value is the Performance Report Fuel Data

REVISION 2

**Required Control Efficiency (%)**

$$= \left( 1 - \frac{\text{Allowable Particulate Emission Rate (lb/hr)}}{\text{Potential Particulate Emission Rate (lb/hr)}} \right) * 100$$

Variables required for this calculation are as follows

Allowable Particulate Emission Rate (lb/hr)                      Source of this value is a previous calculation

Potential Particulate Emission Rate (lb/hr)                      Source of this value is a previous calculation

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**Precipitator Efficiency (%)**

$$= \left( 1 - e^{-0.06 * 0.55 * \text{Corona Power Density (W/1000 ACFM)}} \right) * 100$$

Variables required for this calculation are as follows

Corona Power Density (W/1000 ACFM)                      Source of this value is a previous calculation

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Harrison Power Station  
 Revision 2  
 45CSR2

<b>Table 1 - Sum of Design Heat Inputs for Similar Units</b>					
<b>Type 'a'</b>		<b>Type 'b'</b>		<b>Type 'c'</b>	
<b>(A) Unit ID</b>	<b>(B) DHI (mmBTU/hr)</b>	<b>(C) Unit ID</b>	<b>(D) DHI (mmBTU/hr)</b>	<b>(E) Unit ID</b>	<b>(F) DHI (mmBTU/hr)</b>
1	6,325	Aux Blr 1A	202.2		
2	6,325	Aux Blr 1B	202.2		
3	6,325				
Sum of DHI for all Type 'a' units	18,975	Sum of DHI for all Type 'a' units	404.4	Sum of DHI for all Type 'a' units	0

Harrison Power Station  
 Revision 2  
 45CSR2

<b>Table 2 - Weight Emission Limits for Similar Units</b>			
<b>(A)</b>	<b>(B) Total Design Heat Input (mmBTU/hr)</b>	<b>(C) Factor from 45CSR2, Subsection 4.1 (lb/mmBTU)</b>	<b>(D) Weight Emission Rate (lb/hr)<sup>1,2</sup></b>
Sum of DHI for all Type 'a' units	18975	0.05	948.75
Sum of DHI for all Type 'b' units	404.4	0.09	36.40
Sum of DHI for all Type 'c' units		N/A, look up lb/hr limit in 45CSR2, Table 45-2	

<sup>1</sup> If the calculated weight emission limit for Type 'a' units is greater than 1200 lbs/hr, then 1200 lbs/hr is the limit.

<sup>2</sup> If the calculated weight emission limit for Type 'b' units is greater than 600 lbs/hr, then 600 lbs/hr is the limit.

Harrison Power Station  
 Revision 2  
 45CSR2

<b>Table 3 - Registration of Standard Individual Stack Emission Rates</b>				
<b>(A) Stack ID</b>	<b>(B) Sum of DHI for all units venting thru stack (mmBTU/hr)</b>	<b>(C) Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU/hr)</b>	<b>(D) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)</b>	<b>(E) Stack Emission Rate (lb/hr) [(B/C)*D=E]</b>
1	6,325	18,975	948.75	316.25
2	6,325	18,975	948.75	316.25
3	6,325	18,975	948.75	316.25
<b>Stack Allowable Emission Rate (lb/hr)</b>				948.75

Harrison Power Station  
 Revision 2  
 45CSR2

<b>Table 3 - Registration of Standard Individual Stack Emission Rates</b>				
<b>(A) Stack ID</b>	<b>(B) Sum of DHI for all units venting thru stack (mmBTU/hr)</b>	<b>(C) Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU/hr)</b>	<b>(D) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)</b>	<b>(E) Stack Emission Rate (lb/hr) [(B/C)*D=E]</b>
Aux Stack	404.4	404.4	36.40	36.40
<b>Stack Allowable Emission Rate (lb/hr)</b>				36.40

Harrison Power Station  
 Revision 2  
 45CSR2

*ALTERNATE SCENARIO*

<b>Table 3 - Registration of Standard Individual Stack Emission Rates</b>				
<b>(A)</b> <b>Stack ID</b>	<b>(B)</b> <b>Sum of DHI for all units venting thru stack (mmBTU/hr)</b>	<b>(C)</b> <b>Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU/hr)</b>	<b>(D)</b> <b>Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)</b>	<b>(E)</b> <b>Stack Emission Rate (lb/hr) [(B/C)*D=E]</b>
Unscrub #1	9487.5	18,975	948.75	474.375
Unscrub #2	9487.5	18,975	948.75	474.375
<b>Stack Allowable Emission Rate (lb/hr)</b>				<b>948.75</b>

Note: Unscrubbed / bypass stacks #1 and #2 are only in use when main stacks 1,2, and 3 are not in use. Therefore, half of total DHI for all units venting through main stacks 1,2, and 3 will vent through each bypass stack.

Harrison Power Station  
 Revision 2  
 45CSR2

*ALTERNATE SCENARIO*

<b>Table 3 - Registration of Standard Individual Stack Emission Rates</b>				
<b>(A)</b> <b>Stack ID</b>	<b>(B)</b> <b>Sum of DHI for all units venting thru stack (mmBTU/hr)</b>	<b>(C)</b> <b>Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU/hr)</b>	<b>(D)</b> <b>Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)</b>	<b>(E)</b> <b>Stack Emission Rate (lb/hr) [(B/C)*D=E]</b>
1 or 2 or 3	8,433	18,975	948.75	421.65
1 or 2 or 3	8,433	18,975	948.75	421.65
<b>Stack Allowable Emission Rate (lb/hr)</b>				<b>843.30</b>

Calculation: *When only two stacks are in use, a heat input equivalent to 1 1/3 units will vent through a single stack:*

Sum of DHI venting through single stack 1 or 2 or 3 = (DHI for one unit) x 1 1/3 units  
 8,433 mmBtu/Hr = 6,325 x 1 1/3

Stack Emission Rate = (Sum of DHI all units through stack) / (Sum of DHI all similar units) x Wt. Emission Rate all similar units (Table 2)

Stack Emission Rate = (8,433mmBtu/Hr) / (18,975mmBtu/Hr) x 948.75 lb/hr = 421.65

Harrison Power Station  
 Revision 2  
 45CSR2

In Table 4 below, the owner or operator may register individual stack allowable emission rates, differing from those calculated in Table 3, as provided for in 45CSR2, Subsection 4.2.

<b>Table 4 - Registration of Alternative Stack Emission Rates</b>		
<b>(A) Stack ID</b>	<b>(B) Identify each unit venting thru stack</b>	<b>(C) Alternative Stack Emission Rate (lb/hr)</b>
N/A	See Table 3 (Alternate Scenarios)	N/A
<b>Sum of Alternative Stack Emission Rates (lb/hr)<sup>1</sup></b>		<b>0</b>

<sup>1</sup> The sum of the Alternative Stack Emission Rates for similar units shall not exceed the Weight Emission Rates for all Similar Units in Table 2, Column D.

Harrison Power Station  
 Revision 2  
 45CSR10

<b>Table 1 - Sum of Design Heat Inputs for Similar Units</b>					
<b>Type 'a'</b>		<b>Type 'b'</b>		<b>Type 'c'</b>	
<b>(A) Unit ID</b>	<b>(B) DHI (mmBTU/hr)</b>	<b>(C) Unit ID</b>	<b>(D) DHI (mmBTU/hr)</b>	<b>(E) Unit ID</b>	<b>(F) DHI (mmBTU/hr)</b>
1	6,325	Aux Blr 1A	202.2		
2	6,325	Aux Blr 1B	202.2		
3	6,325				
Sum of DHI for all Type 'a' units	18,975	Sum of DHI for all Type 'a' units	404.4	Sum of DHI for all Type 'a' units	0

Harrison Power Station  
 Revision 2  
 45CSR10

<b>Table 2 - Weight Emission Limits for Similar Units</b>			
<b>(A)</b>	<b>(B) Total Design Heat Input (mmBTU/hr)</b>	<b>(C) Factor from 45CSR10, Section 3 (lb/mmBTU)</b>	<b>(D) Weight Emission Rate (lb/hr) [B * C = D]</b>
Sum of DHI for all Type 'a' units	18,975	5.12	97,152
Sum of DHI for all Type 'b' units	404.4	3.2	1,294.08
Sum of DHI for all Type 'c' units			0

Note: In accordance with 45CSR10 Section 3.3.a, the weight emission rate for type "a" units will be based upon actual operating heat inputs, not design heat inputs. Therefore, the emission rate in column D for type "a" units may vary slightly from the value shown.

Harrison Power Station  
 Revision 2  
 45CSR10

<b>Table 3 - Registration of Standard Individual Stack Emission Rates</b>					
<b>(A) Stack ID</b>	<b>(B) Identify each unit venting thru stack</b>	<b>(C) Sum of DHI for all units venting thru stack (mmBTU/hr)</b>	<b>(D) Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU/hr)</b>	<b>(E) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)</b>	<b>(F) Stack Emission Rate (lb/hr) [(C/D)*E=F]</b>
1	1	6,325	18,975	97,152	32,384
2	2	6,325	18,975	97,152	32,384
3	3	6,325	18,975	97,152	32,384
<b>Stack Allowable Emission Rate (lb/hr)</b>					<b>97,152</b>

Harrison Power Station  
 Revision 2  
 45CSR10

<b>Table 3 - Registration of Standard Individual Stack Emission Rates</b>					
<b>(A) Stack ID</b>	<b>(B) Identify each unit venting thru stack</b>	<b>(C) Sum of DHI for all units venting thru stack (mmBTU/hr)</b>	<b>(D) Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU/hr)</b>	<b>(E) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)</b>	<b>(F) Stack Emission Rate (lb/hr) [(C/D)*E=F]</b>
Aux Stack	Aux Blr 1A, 1B	404.4	404.4	1,294.08	1,294.08
<b>Stack Allowable Emission Rate (lb/hr)</b>					<b>1,294.08</b>

Harrison Power Station  
 Revision 2  
 45CSR10

*ALTERNATE SCENARIO*

<b>Table 3 - Registration of Standard Individual Stack Emission Rates</b>					
<b>(A) Stack ID</b>	<b>(B) Identify each unit venting thru stack</b>	<b>(C) Sum of DHI for all units venting thru stack (mmBTU/hr)</b>	<b>(D) Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU/hr)</b>	<b>(E) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)</b>	<b>(F) Stack Emission Rate (lb/hr) [(C/D)*E=F]</b>
Unscrub #1	see note below	9487.5	18,975	97,152	48,576
Unscrub #2	see note below	9487.5	18,975	97,152	48,576
<b>Stack Allowable Emission Rate (lb/hr)</b>					<b>97,152</b>

**Note:**

Unscrubbed/bypass stacks #1 and #2 are only in use when main scrubbed stacks 1,2, and 3 are not in use.

Half of the total DHI for all units venting through main stacks 1, 2, and 3 will vent through the two unscrubbed/bypass stacks.

Harrison Power Station  
 Revision 2  
 45CSR10

*ALTERNATE SCENARIO*

<b>Table 3 - Registration of Standard Individual Stack Emission Rates</b>					
<b>(A) Stack ID</b>	<b>(B) Identify each unit venting thru stack</b>	<b>(C) Sum of DHI for all units venting thru stack (mmBTU/hr)</b>	<b>(D) Sum of DHI for all Similar Units (Table 2, Column B) (mmBTU/hr)</b>	<b>(E) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)</b>	<b>(F) Stack Emission Rate (lb/hr) [(C/D)*E=F]</b>
1 or 2 or 3	1 1/3 units, any combination of units 1,2,3	8,433	18,975	97,152	43,177
1 or 2 or 3	1 1/3 units, any combination of units 1,2,3	8,433	18,975	97,152	43,177
<b>Stack Allowable Emission Rate (lb/hr)</b>					<b>86,354</b>

Calculation: *When only two stacks are in use, a heat input equivalent to 1 1/3 units will vent through a single stack:*

Sum of DHI venting through single stack 1 or 2 or 3 = (DHI for one unit) x 1 1/3 units  
 8,433 mmBtu/Hr = 6,325 x 1 1/3

Single stack Emission Rate = (Sum of DHI all units through stack) / (Sum of DHI all similar units) x Wt. Emiss Rate all similar units (Table 2)

Single stack Emission Rate = (8,433mmBtu/Hr) / (18,975mmBtu/Hr) x 97,152 lb/hr = 43,177

Harrison Power Station  
 Revision 2  
 45CSR10

In Table 4 below, the owner or operator may register individual stack allowable emission rates, differing from those calculated in Table 3, as provided for in 45CSR10, Subsection 3.4.

<b>Table 4 - Registration of Alternative Stack Emission Rates</b>		
<b>(A) Stack ID</b>	<b>(B) Identify each unit venting thru stack</b>	<b>(C) Alternative Stack Emission Rate (lb/hr)</b>
N/A	See Table 3 (Alternate Scenarios)	N/A
<b>Sum of Alternative Stack Emission Rates (lb/hr)<sup>1</sup></b>		<b>0</b>

<sup>1</sup> The sum of the Alternative Stack Emission Rates for similar units shall not exceed the Weight Emission Rates for all Similar Units in Table 2, Column D.

## **APPENDIX C**

### **Harrison Power Station Acid Rain Permit**



west virginia department of environmental protection  
Division of Air Quality

## Phase II Acid Rain Permit

Plant Name: <b>Harrison Power Station</b>	Permit #: <b>R33-3944-2012-3</b>
Affected Unit(s): <b>1, 2, 3</b>	
Operator: <b>Allegheny Energy Supply Company, LLC</b>	ORIS Code: <b>3944</b>
Effective Date	From: <b>January 1, 2008</b> To: <b>December 31, 2012</b>

### Contents:

1. Statement of Basis.
2. SO<sub>2</sub> allowances allocated under this permit and NO<sub>x</sub> requirements for each affected unit.
3. Comments, notes and justifications regarding permit decisions and changes made to permit application forms during the review process, and any additional requirements or conditions.
4. The permit application forms submitted for this source, as corrected by the West Virginia Division of Air Quality. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

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### 1. Statement of Basis

**Statutory and Regulatory Authorities:** In accordance with W. Va. Code §22-5-4(a)(16) and Titles IV and V of the Clean Air Act, the West Virginia Department of Environmental Protection, Division of Air Quality issues this permit pursuant to 45CSR33 and 45CSR30.

### Permit Approval

  
\_\_\_\_\_  
John A. Benedict, Director  
Division of Air Quality

  
\_\_\_\_\_  
Date

Promoting a healthy environment

**West Virginia Department of Environmental Protection • Division of Air Quality**

Plant Name: <b>Harrison Power Station</b>	Permit #: <b>R33-3944-2012-3</b>
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**2. SO<sub>2</sub> Allocations and NO<sub>x</sub> Requirements for each affected unit**

Unit No. <b>1</b>
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SO <sub>2</sub> Allowances	Year				
	2008	2009	2010	2011	2012
<b>Table 2 allowances, as adjusted by 40CFR Part 73</b>	20966*	20966*	21002	21002	21002
<b>Repowering plan allowances</b>	N/A	N/A	N/A	N/A	N/A

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (See 40 CFR §72.84). \*Note: 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10.

NO <sub>x</sub> Requirements	2008	2009	2010	2011	2012
<b>NO<sub>x</sub> Limit (lb/mmBtu)</b>	0.42	0.42	0.42	0.42	0.42

Pursuant to 40 CFR §76.11, the West Virginia Department of Environmental Protection, Division of Air Quality approves five (5) NO<sub>x</sub> emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2008, 2009, 2010, 2011 and 2012. Under each plan, the unit's NO<sub>x</sub> emissions shall not exceed the annual alternative contemporaneous emission limitation (ACEL) of 0.42 lb/mmBtu. In addition, this unit shall not have an annual heat input less than 42,311,000 mmBtu.

Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR §76.5, 76.6 or 76.7, except that for early election units, the applicable emission limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Pennsylvania Department of Environmental Resources, Bureau of Air Quality Control and the Maryland Department of Environment, Air and Radiation Management Administration have also approved this averaging plan.

In addition to the described NO<sub>x</sub> compliance plans, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.

**3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:**

As a result of comments from American Electric Power, the 2008 and 2009 SO<sub>2</sub> allowances have been adjusted to reflect an October 30, 2000 reallocation of allowances by USEPA. The 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10.

As a result of comments from USEPA, the "Operator" on Page 1 has been changed from *Monongahela Power Company* to *Allegheny Energy Supply Company, LLC*

**4. Permit application forms:**

Attached.

West Virginia Department of Environmental Protection • Division of Air Quality

Plant Name: Harrison Power Station	Permit #: R33-3944-2012-3
------------------------------------	---------------------------

2. SO<sub>2</sub> Allocations and NO<sub>x</sub> Requirements for each affected unit

Unit No. 2
------------

SO <sub>2</sub> Allowances	Year				
	2008	2009	2010	2011	2012
Table 2 allowances, as adjusted by 40CFR Part 73	19902*	19902*	19936	19936	19936
Repowering plan allowances	N/A	N/A	N/A	N/A	N/A

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (See 40 CFR §72.84). \*Note: 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10.

NO <sub>x</sub> Requirements	2008	2009	2010	2011	2012
NO <sub>x</sub> Limit (lb/mmBtu)	0.42	0.42	0.42	0.42	0.42

Pursuant to 40 CFR §76.11, the West Virginia Department of Environmental Protection, Division of Air Quality approves five (5) NO<sub>x</sub> emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2008, 2009, 2010, 2011 and 2012. Under each plan, the unit's NO<sub>x</sub> emissions shall not exceed the annual alternative contemporaneous emission limitation (ACEL) of 0.42 lb/mmBtu. In addition, this unit shall not have an annual heat input less than 42,513,000 mmBtu.

Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR §76.5, 76.6 or 76.7, except that for early election units, the applicable emission limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Pennsylvania Department of Environmental Resources, Bureau of Air Quality Control and the Maryland Department of Environment, Air and Radiation Management Administration have also approved this averaging plan.

In addition to the described NO<sub>x</sub> compliance plans, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

As a result of comments from American Electric Power, the 2008 and 2009 SO<sub>2</sub> allowances have been adjusted to reflect an October 30, 2000 reallocation of allowances by USEPA. The 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10.

As a result of comments from USEPA, the "Operator" on Page 1 has been changed from *Monongahela Power Company* to *Allegheny Energy Supply Company, LLC*

4. Permit application forms:

Attached.

**West Virginia Department of Environmental Protection • Division of Air Quality**

Plant Name: <b>Harrison Power Station</b>	Permit #: <b>R33-3944-2012-3</b>
---	----------------------------------

**2. SO<sub>2</sub> Allocations and NO<sub>x</sub> Requirements for each affected unit**

Unit No. <b>3</b>
-------------------

SO <sub>2</sub> Allowances	Year				
	2008	2009	2010	2011	2012
<b>Table 2 allowances, as adjusted by 40CFR Part 73</b>	17898*	17898*	17928	17928	17928
<b>Repowering plan allowances</b>	N/A	N/A	N/A	N/A	N/A

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (See 40 CFR §72.84). \*Note: 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10.

NO <sub>x</sub> Requirements	2008	2009	2010	2011	2012
<b>NO<sub>x</sub> Limit (lb/mmBtu)</b>	0.42	0.42	0.42	0.42	0.42

Pursuant to 40 CFR §76.11, the West Virginia Department of Environmental Protection, Division of Air Quality approves five (5) NO<sub>x</sub> emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2008, 2009, 2010, 2011 and 2012. Under each plan, the unit's NO<sub>x</sub> emissions shall not exceed the annual alternative contemporaneous emission limitation (ACEL) of 0.42 lb/mmBtu. In addition, this unit shall not have an annual heat input less than 36,074,000 mmBtu.

Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR §76.5, 76.6 or 76.7, except that for early election units, the applicable emission limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Pennsylvania Department of Environmental Resources, Bureau of Air Quality Control and the Maryland Department of Environment, Air and Radiation Management Administration Air Program Coordination have also approved this averaging plan.

In addition to the described NO<sub>x</sub> compliance plans, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.

**3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:**

As a result of comments from American Electric Power, the 2008 and 2009 SO<sub>2</sub> allowances have been adjusted to reflect an October 30, 2000 reallocation of allowances by USEPA. The 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10.

As a result of comments from USEPA, the "Operator" on Page 1 has been changed from *Monongahela Power Company* to *Allegheny Energy Supply Company, LLC*

**4. Permit application forms:**

Attached.



ORIGINAL  
Acid Rain - Page 2

Harrison Power Station  
Plant Name (from Step 1)

### **Permit Requirements**

#### **STEP 3**

#### **Read the standard requirements**

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

### **Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

### **Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

ORIGINAL  
Acid Rain - Page 3

Harrison Power Station  
Plant Name (from Step 1)

**STEP 3,  
Cont'd.**

**Nitrogen Oxides Requirements** The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit 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 prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; 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 changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 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 Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

ORIGINAL

Acid Rain - Page 4

Harrison Power Station Plant Name (from Step 1)
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Step 3,  
Cont'd.

**Liability, Cont'd.**

- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

**Certification**

Read the  
certification  
statement,  
sign, and  
date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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.

Leo C. Rajter, Vice President Generation Operations	
Name	
Signature 	Date 6/26/07

EPA Form 7610-16 (rev. 12-03)

ORIGINAL



United States  
 Environmental Protection Agency  
 Acid Rain Program

OMB No. 2060-0258

## Phase II NO<sub>x</sub> Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is:  New  Revised

Page 1 of 3

### STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
Albright	WV	1	0.50	0.69	9,005,000
Albright	WV	2	0.50	0.70	9,005,000
Albright	WV	3	0.45	0.40	8,294,000
Armstrong	PA	1	0.50	0.40	10,571,000
Armstrong	PA	2	0.50	0.36	10,841,000
Fort Martin	WV	1	0.45	0.31	35,426,000
Fort Martin	WV	2	0.68	0.31	33,811,000
Harrison	WV	1	0.50	0.42	42,311,000
Harrison	WV	2	0.50	0.42	42,513,000

### STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.43

$$\frac{\sum_{i=1}^n (R_{Li} \times HI_i)}{\sum_{i=1}^n HI_i}$$

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.56

$$\frac{\sum_{i=1}^n [R_{Ii} \times HI_i]}{\sum_{i=1}^n HI_i}$$

≤

Where,

- R<sub>Li</sub> = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;
- R<sub>Ii</sub> = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;
- HI<sub>i</sub> = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;
- n = Number of units in the averaging plan

ORIGINAL

Albright, Armstrong, Ft. Martin, Harrison, Hatfield, Mitchell, Pleasants,  
Rivesville, R. Paul Smith, and Willow Island  
Plant Name (from Step 1)

NO<sub>x</sub> Averaging - Page 2

**STEP 3**

Mark one of  
the two options  
and enter dates.

This plan is effective for calendar year \_\_\_\_\_ through calendar year \_\_\_\_\_  
unless notification to terminate the plan is given.

Treat this plan as  identical plans, each effective for one calendar year for the following  
calendar years: 2008, 2009, 2010, 2011 and 2012 unless notification to terminate  
one or more of these plans is given.

**STEP 4**

Read the special  
provisions and  
certification, enter the  
name of the designated  
representative, and  
sign and date.

**Special Provisions**

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO<sub>x</sub> under the plan only if the following requirements are met:

- (i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
- (a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,
- (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
- (ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
- (iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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.

Name	David C. Cannon Jr., DR	
Signature		Date
		6/24/2007



ORIGINAL



United States  
 Environmental Protection Agency  
 Acid Rain Program

OMB No. 2060-0258

# Phase II NO<sub>x</sub> Compliance Plan

Page 1 of 2

For more information, see instructions and refer to 40 CFR 76.9

This submission is:  New  Revised

**STEP 1**  
 Indicate plant name,  
 State, and ORIS code  
 from NADB, if applicable

Plant Name Harrison Power Station	WV State	3944 ORIS Code
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**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID#	ID#	ID#	ID#	ID#	ID#
1	2	3			
DBW	DBW	DBW			
Type	Type	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EPA Form 7610-28 (12-03)

ORIGINAL

Plant Name (from Step 1) <b>Harrison Power Station</b>
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NO<sub>x</sub> Compliance - Page 2  
 Page 2 of 2

**STEP 2, cont'd.**

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	<input type="checkbox"/>					
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>					
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>					
(p) Repowering extension plan approved or under review	<input type="checkbox"/>					

**STEP 3**  
**Read the standard requirements and certification, enter the name of the designated representative, sign &**

**Standard Requirements**

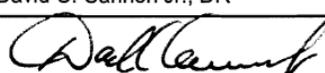
General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

**Special Provisions for Early Election Units**

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).  
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.  
Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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.

Name	David C. Cannon Jr., DR
Signature	
Date	6/24/2007

## **APPENDIX D**

### **Harrison Power Station CAMR Compliance Order CO-R37-C-2008-4**



west virginia department of environmental protection

Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone 304/926-0475 • FAX: 304/926-0479

Joe Manchin III, Governor  
Stephanie R. Timmermeyer, Cabinet Secretary  
www.wvdep.org

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

DATE: April 7, 2008

ORDER NO.: # CO-R37-C-2008-4

TO: Allegheny Energy Supply Company, LLC  
American Bituminous Power Partners  
Appalachian Power Company

Dominion Generation  
Morgantown Energy Associates  
Ohio Power Company

**INTRODUCTION**

This Compliance Order is issued by 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. to the above owners or operators

**FINDINGS OF FACT**

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

1. On December 20, 2000, EPA issued a finding pursuant to CAA section 112(n)(1)(A), *Regulatory Finding on the Emissions of Hazardous Air Pollutants from Electric Utility Steam Generating Units* [65FR79825, 20 DEC2000], that it was appropriate and necessary to regulate mercury (Hg) under Section 112 of the Clean Air Act (CAA).
2. On March 29, 2005, EPA published a final agency action which delisted such utility units under section 112(n)(1) of the CAA, *Revision of December 2000 Regulatory Finding on the Emissions of Hazardous Air Pollutants from Electric Utility Steam Generating Units and the Removal of Coal- and Oil-Fired Electric Utility Steam Generating Units from the Section 112(c) List* [70FR15994, 29MAR2005].
3. On May 18, 2005, EPA published *Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units* [70FR28606, 18MAY2005].

**Promoting a healthy environment.**

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 Page 2

This rule is referred to as the Clean Air Mercury Rule (CAMR). This rule required States to submit a 111(d) State Plan for EPA approval outlining a plan to meet the CAMR requirements.

4. CAMR required Hg reductions in two phases, with Phase I covering 2010 - 2017, and Phase II beginning in 2018. CAMR Phase I did not impose any Hg reduction requirements beyond those required to control SO<sub>2</sub> and NO<sub>x</sub> emissions under Phase I of the Clean Air Interstate Rule (CAIR) [70FR25162, 12MAY2005]. CAIR requires SO<sub>2</sub> and NO<sub>x</sub> reductions in 22 eastern states, including West Virginia.
5. To comply with CAMR, West Virginia implemented 45CSR37 – Mercury Budget Trading Program to Reduce Mercury Emissions – which became effective on May 1, 2006. 45CSR37 is the state counterpart to the federal CAMR.
6. On July 12, 2006, West Virginia submitted 45CSR37 to EPA to meet the 111(d) State Plan requirements of CAMR.
7. On February 8, 2008, the United States Court of Appeals for the District of Columbia Circuit (DC Circuit) issued a decision in *New Jersey v. EPA* which vacated two of the rules listed above:
  - (a) 40 CFR Part 63 – Revision of December 2000 Regulatory Finding on the Emissions of Hazardous Air Pollutants from Electric Utility Steam Generating Units and the Removal of Coal- and Oil-Fired Electric Utility Steam Generating Units from the Section 112(c) List [70FR15994, 29MAR2005]; and
  - (b) 40 CFR Parts 60, 72 and 75 – Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units (CAMR) [70FR28606, 18MAY2005].
8. On March 14, 2008, the DC Circuit issued the mandate that the CAMR be vacated.
9. On March 24, 2008, EPA appealed the decision of the DC Circuit to vacate the CAMR. EPA has requested an *en banc* hearing. Litigation is ongoing.
10. The following companies own and/or operate one or more fossil fuel-fired stationary boiler(s) at the identified facilities, serving a generator with nameplate capacity greater than 25 MW<sub>e</sub> which emits mercury (Hg) in West Virginia:

Company	Facility	ID Number
Allegheny Energy Supply Company, LLC	Albright Power Station	077-00001
	Fort Martin Power Station	061-00001
	Harrison Power Station	033-00015
	Pleasants Power Station	073-00005
	Rivesville Power Station	049-00009
	Willow Island Power Station	073-00004

**Promoting a healthy environment.**

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Page 3

<b>Company</b>	<b>Facility</b>	<b>ID Number</b>
American Bituminous Power Partners	Grant Town Power Plant	049-00026
Appalachian Power Company	John E. Amos	079-00006
	Kanawha River	039-00006
	Mountaineer	053-00009
Dominion Generation	Mt. Storm Power Station	023-00003
	North Branch Power Station	023-00014
Morgantown Energy Associates	Morgantown Powr Plant	061-00027
Ohio Power Company	Kammer	051-00006
	Mitchell	051-00005
	Philip Sporn	053-00001

11. Such units are of sufficient capacity to render them subject to the Standard Requirements under 45CSR37, including the requirement to obtain a Hg budget permit, and comply with all applicable provisions of the CAMR program.
12. The applicable provisions of the CAMR program were vacated by the DC Circuit, therefore the only 45CSR37 requirement that is currently applicable is the requirement to obtain a Hg budget permit, which is contained in Section 21 of the rule. The Hg budget permit application is required to be submitted by the applicant's Hg designated representative. However, since such representative must be registered with EPA under the CAMR program and since the federal CAMR program was vacated, there are no Hg budget designated representatives.
13. This Order does not make any finding of violation against the owners or operators listed in this Order.

**ORDER HOLDING 45CSR37 REQUIREMENTS IN ABEYANCE**

Since the provisions of 45CSR37 are intrinsically tied to the provisions of the federal CAMR rule, which has been vacated, and the Hg reductions required under Phase I of the CAMR will still be obtained since they were predicated on the Hg reduction co-benefit of SO<sub>2</sub> and NO<sub>x</sub> reductions required under the Clean Air Interstate Rule [70FR25162, 12MAY2005], the Director finds that it is appropriate to hold specific requirements of 45CSR37 in abeyance pending resolution of the ongoing federal litigation related to CAMR.

Now, therefore, the Director hereby ORDERS that the requirements of 45CSR37, Section 21 be held in abeyance pending resolution of the ongoing CAMR litigation or final action is taken by the State to revoke this order or to repeal, revise or replace 45CSR37.

**Promoting a healthy environment.**

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**OTHER PROVISIONS**

1. This Order shall not in any way be construed as relieving the owners or operators listed above of the obligation to comply with any other applicable law, permit, order, or any requirement otherwise applicable.
2. 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.

This Order shall become effective April 7, 2008.

  
\_\_\_\_\_  
John A. Benedict, Director  
Division of Air Quality

**Promoting a healthy environment.**

## **APPENDIX E**

### **Harrison Power Station CAIR Permit Application**



STEP 3,  
continued

Plant Name Harrison Power Station

CAIR Permit Application  
Page 2

**(b) Monitoring, reporting and recordkeeping requirements.**

(1) The owners and operators and the CAIR designated representative, of each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> 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<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) with the CAIR NO<sub>x</sub> Annual emissions limitation, CAIR NO<sub>x</sub> Ozone Season emissions limitation and CAIR SO<sub>2</sub> 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<sub>x</sub> Annual source and each CAIR NO<sub>x</sub> Annual unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Annual allowances available for compliance deductions for the control period under 45CSR§39-6.3.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.

(2) A CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> Annual allowance was allocated.

(4) CAIR NO<sub>x</sub> Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

(5) A CAIR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> Annual allowance to or from a CAIR NO<sub>x</sub> 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<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-6.3.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO<sub>x</sub> Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.

(2) A CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> Ozone Season allowance was allocated.

(4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.

(5) A CAIR NO<sub>x</sub> Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> 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 SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> 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 SO<sub>2</sub> units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

(2) A CAIR SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> allowance was allocated.

(4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with sections 51 through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in any CAIR permit of the source.

Plant Name Harrison Power Station

**STEP 3,  
continued**

**(f) Excess emissions requirements.**

(1) If a CAIR NO<sub>x</sub> Annual source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> Annual emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO<sub>x</sub> Annual unit at the source shall surrender the CAIR NO<sub>x</sub> 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<sub>x</sub> Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> 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 SO<sub>2</sub> source emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

(i) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> 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<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> 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<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> 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<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

**(h) Liability.**

(1) Each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each NO<sub>x</sub> unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program or CAIR SO<sub>2</sub> Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source or CAIR SO<sub>2</sub> source (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source or CAIR SO<sub>2</sub> source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> Annual units, CAIR NO<sub>x</sub> Ozone Season units or CAIR SO<sub>2</sub> units (as applicable) at the source.

(3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program or CAIR SO<sub>2</sub> Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> Annual unit, CAIR SO<sub>2</sub> unit or CAIR NO<sub>x</sub> Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit or CAIR SO<sub>2</sub> unit (as applicable) shall also apply to the owners and operators of such unit.

**(i) Effect on Other Authorities.**

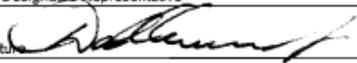
No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) or CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> 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.

Plant Name	Harrison Power Station
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STEP 3,  
continued

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	David C. Cannon Jr.	
Signature		Date
		6/22/2007